

Contents

International Consumer Product Testing Across Cultures and Countries

GENERAL PRINCIPLES

ARGENTINA

BRAZIL

CANADA

CHINA

FRANCE

REPUBLIC OF INDIA

JAPAN

REPUBLIC OF KOREA

MEXICO

THE NETHERLANDS

NEW ZEALAND AND AUSTRALIA

PHILIPPINES

POLAND

SPAIN

THAILAND

UNITED KINGDOM

UNITED STATES

TABLE OF CONTENTS

ACKNOWLEDGEMENT	2
I. SCOPE	3
II. INTRODUCTION	3
III. PRELIMINARY ISSUES	4
A. GOVERNMENT REGULATIONS.....	4
B. CUSTOMS AND CULTURE.....	6
C. TEST DESIGN AND EXECUTION.....	6
IV. TEST DESIGN AND PLANNING	12
A. INITIAL INTERACTION WITH TEST FACILITY OR LOCAL VENDOR.....	12
B. MATERIALS NEEDED AND ISSUES TO BE CONSIDERED PRIOR TO TESTING.....	13
C. TEST DESIGN AND PROTOCOL DEVELOPMENT.....	14
D. PILOT TEST.....	19
V. QUESTIONNAIRE ISSUES	19
A. ATTRIBUTES.....	20
B. SCALE TYPE.....	20
C. BALLOT VALIDATION.....	21
VI. TEST ADMINISTRATION	21
A. PARTICIPANTS AND TEST STAFF.....	21
B. SERVING PROTOCOLS.....	23
C. TEST VALIDATION.....	23
VII. MULTI-COUNTRY/CULTURE APPROACH	23
A. BUSINESS PERSPECTIVE.....	24
B. PROJECT MANAGEMENT/LOGISTICS.....	24
C. ADAPTATION/LOCALIZATION OF DESIGN.....	26
D. DATA HANDLING AND INTERPRETATION OF RESULTS.....	27
VIII. DATA ISSUES	28
A. RAW DATA.....	28
B. DATA ANALYSIS AND INTERPRETATION.....	29
IX. CASE STUDIES	30
A. CASE STUDY I.....	30
B. CASE STUDY II.....	31
C. CASE STUDY III.....	35
X. BIBLIOGRAPHY	40

ACKNOWLEDGEMENT

This manual is being published as a result of several years of dedicated and enthusiastic work by all authors and contributors. It was our sincere pleasure to work with so many professionals around the world in this true international effort.

The manual's general principles section was developed thanks to the contributions and commitment of many dedicated professionals. In particular, we wish to acknowledge the outstanding contributions of Dennis Passe and Laura Anderson. They were key team members in the development of ideas, sections in this manual, and the completion of numerous reviews and revisions. Their support in this endeavor was invaluable.

Colleagues who provided leadership in the development of the manual's chapters deserve special recognition: Barbara Booth (Introduction), Dennis Passe (Preliminary issues and Introduction), Joan Stouffer and Gregory Stucky (Test Design and Planning), Melissa A. Jeltema (Questionnaire Issues), Janya Walsh (Test Administration), Dana Craig-Petsinger (Multi-Country/Culture Approach), Chris Findlay (Data Issues), and Frank Rossi and Alicia Thomas (Case Studies). We greatly appreciate their hard work, expertise and dedication to this project.

Under the leadership of the colleagues above, other members contributed to the development of chapters' sections. Noteworthy contributions include those of Chantal Gilbert, Mary Hollingsworth, Brenda Hammet-Rose, Kristine Wilke, Diane Salko, Susan Fawcett, Suzanne Whitlock, Dave Lundahl, and Michell Kinzbach.

We wish to sincerely thank all authors who developed the country specific documents. This allowed us to share with the sensory and market research community their expertise and knowledge in conducting sound consumer research in specific countries. Each of those documents exemplifies the theory covered in the general principles section of this publication for specific countries and cultures which add to the richness and relevance of this manual.

Our appreciation goes to the ASTM committee E18 members and sensory professionals who attended our meetings over the years and helped us with their ideas and review of documents.

We are all grateful to Ms. Kathy Dernoga, who provided us with valuable guidance and assistance throughout the publication process.

With the global role taken by the sensory and market research community we trust that this manual will be very useful to professionals involved in international consumer product testing. We wish that this publication will foster continued interest in this fascinating field. Finally, we hope that this manual will represent a milestone for the development of future endeavours in international consumer product testing across countries and cultures.

Alejandra M. Muñoz

Silvia C. King

I. SCOPE

This publication presents a discussion of issues involved in the planning, design, and execution of international consumer product tests across cultures and countries (cross-cultural consumer research tests), and the data analysis and interpretation of the results. This document addresses the unique situations involved in the design and execution of tests conducted with different cultures or in foreign countries. Special consideration is given to language issues, questionnaire design, and test execution based on key cultural differences among countries.

This publication consists of two sections: the main document (General Principles) and individual documents covering specific countries or cultures. The former addresses the general test conditions and issues involved in international consumer product testing across cultures and countries. While some specifics and examples are provided throughout the General Principles document, explicit examples and country information are provided in the country specific documents. For discussion purposes the country specific documents will be referred to as appendices. These appendices focus on country-specific testing information, caveats, and scenarios.

This document does not recommend a specific test method or procedure. Rather, it is a discussion of relevant topics applicable to consumer research conducted with different cultures and in different countries.

II. INTRODUCTION

With the tremendous growth in multi-national business, it is increasingly important for companies to understand consumer behavior and preferences across different areas of the world for the successful introduction of their products in foreign markets. The role of hereditary, dietary, cultural, religious, and ecological influences on consumer responses must be recognized. According to Zimmerman and Szenberg (2000): “to compete successfully in the international marketplace, all firms need information about foreign market cultures, consumer preferences, perceptions and values (p. 158).” Even within a country, significant cultural subpopulations or ethnic groups represent growing market niches and companies should consider the pitfalls of a “one-size-fits-all” approach to gathering consumer information.

For companies to make appropriate business decisions based on cross-cultural consumer research, studies must be designed and executed with consideration of the unique experiences and preferences of the target consumer populations (Pawle 1999). To meet those objectives, sensory/consumer scientists and market researchers working for those companies must understand the cultural nuances in the local consumer population to effectively design and conduct cross-cultural research studies. Sensory/consumer scientists and market researchers should work together as an effective international team (Segalla 1998; Katz 1998). This collaboration is needed to communicate with local consumer market researcher agencies, operate within regional cultural norms, and use appropriate methods for collecting and interpreting cross-cultural consumer data. Several studies have addressed cultural differences in consumer liking and product/concept fit within global marketing strategies, and the value of developing cross-functional and cross-cultural teams at the outset of such studies (Zimmerman and Szenberg 2000; Yeh et al. 1998; McDonald 1995).

Researchers involved in cross-cultural consumer research should become familiar with the literature in this field. Much of the basic research on cross-cultural consumer research has focused on comparative studies of subject responses to sensory stimuli, comparing sensory detection, and discrimination ability (Laing et al. 1963; Lundgren and Jonsson 1978; Druz and Baldwin 1982; Cooper et al. 1991; Pangborn et al. 1988). In general, cross-cultural researchers conclude that there are relatively few differences in objective perception across people from differing cultures; however, important differences in international consumer preferences are recognized. At a SCI conference on Cultural Differences in Sensory Perception and Acceptance (SCI 1998), leading chemosensory researchers concluded that sensitivities to various tastes and smells do not appear to vary with background, while differences do appear in perception of intensities and hedonic ratings of suprathreshold concentrations of specific taste and aroma substances. Schiffman et al. (1981) also observed effects of subculture within a country on attitudes and values. Bertino et al. (1983) demonstrated both intensity and pleasantness rating differences across two cultural groups (European versus Taiwanese) but found an interaction with the type of stimulus used.

In a series of studies, Prescott (1998), Prescott et al. (1992, 1997, 1998), and Prescott and Bell (1995) have demonstrated that individuals display few cross-cultural differences in their perceptions. However, their research showed the importance of familiarity with tastes and aromas, thus implicating

an important role for dietary experience in differences of preference. Suknark et al. (1998) also found that hedonic values were higher for cultures familiar with the tested products.

The impact of culture on preference is immense. For instance, in the realm of food preference, Rozin and Vollmecke (1986) have stated: “If one were interested in determining as much as possible about an adult’s food preferences and could ask only one question, the question should undoubtedly be: ‘What is your culture or ethnic group?’ (p. 437).” Prescott et al. (2001, 2002, 2004) have demonstrated not only differences in acceptance levels of specific foods (i.e., meat), but cultural differences in motives driving food choice (such as health, convenience, sensory appeal, natural context, familiarity).

While cross-cultural differences that pertain to political boundaries are the typical focal point, commonalities among different countries within a region, such as the Arab market, suggest that consumer segmentation may be a useful strategy in these areas of the world. Consequently, international market segmentation that takes advantage of commonalities among countries within a region may greatly enhance marketing efficiency. To the extent that such a strategy is followed, simultaneous testing in several countries may be required (Souiden 2002).

The intent of this manual is to enhance the reader’s awareness of regional dietary, social, political, economic, religious, cultural, and language differences. Failure to take these factors into account can result in communication or translation errors or the use of inappropriate test designs and questionnaires, or both, which may negatively affect the test. Choudhry (1986) discussed the importance of awareness that concepts and vocabulary have very different meanings in different parts of the world. Karahadian (1994) succinctly states: “The biggest concern is in the area of developing appropriate descriptive terminology for attributes that are indicative of characteristics perceived by different ethnic groups (p. 3).” Literal translation of a brand name or slogan may have an inappropriate meaning in another language. The first and perhaps most well known story is that of Chevrolet introducing their “Nova” automobile in Spanish speaking countries. Stories have it that the car sold very poorly because ‘nova’ means “doesn’t go.” In a similar way, Fiat, a sporty Italian auto manufacturer, found that they had to rename their “uno” when selling it in Finland. “Uno” means garbage in Finnish (Taylor 1992). When the Japanese beverage “Pocari Sweat” was brought to the United States the import company learned this cultural lesson firsthand. While the connotations of sweat in Japan are not a detriment in Japanese marketing—since the Japanese believe that it represents a healthy, hard working body—the connotations proved a significant problem in the U.S., and the manufacturer was forced to drop the second word before the product was successfully marketed in the U.S. (Taylor 1992).

The use of certain icons, such as colors, symbols, or logos, may prove to be misleading or offensive in a given culture.

This document illustrates some of the challenges encountered in conducting consumer research in foreign markets and recommends approaches to avoid testing errors. See Brokaw and Lakshman (1995) for a discussion and review of the cross-cultural research area. The advice offered on procedural issues, such as scale orientation, experimental design, word translation, and recruiting and experimental protocols, will help to ensure the validity and success of global consumer test results. As Pring (1981) stated, “Careful consideration is required before conducting work overseas, and a greater preparedness for compromise and flexibility needs to be exerted than is necessary in home markets.”

III. PRELIMINARY ISSUES

Prior to conducting consumer product tests across cultures and countries, basic differences between the home-culture and the host-culture must be obtained and studied. Key areas of differences that must be addressed include: social etiquette, religious practice, dietary and culinary tradition, and political, governmental, legal, and regulatory conditions. Sources of information that must be consulted include formal government and private institutions, as well as informal professional contacts. A coherent and integrated plan must be created to successfully implement a cross-cultural study. The following is an outline that can be used to facilitate the process of obtaining the necessary information to plan and execute consumer product tests across cultures and countries.

A. GOVERNMENT REGULATIONS

1. Sources of general information about the specific test country/culture and government regulations must be consulted. These include but are not limited to: the U.S. State Department, the American Embassy, and the U.S. Chamber of Commerce (professionals in other home countries should consult similar sources in their countries), host-culture consultants, field agencies,

TABLE 1—*Information resources.*

U.S. State Department ^a
American Embassy ^a
U.S. Chamber of Commerce ^a
Food and Drug Administration ^a
International Marketing and Sensory Directory of Consultants ^a
Legal department of your company
Legal counsel in host country
Library/topic-search using a database/internet
Host-culture religious and cultural organizations
World Health Organization
United Nations
Other companies who have conducted research in the target host-culture
Fact sheets for expatriates, found in newspapers and magazines, explaining culture and customs.
Universities and departments of foreign language, anthropology, sociology, etc.
Host-culture customs and importation consultants
Cities of the World, 1993, Four-volume collection with information on more than 1500 cities located in 140 countries.
Countries of the World and Their Leaders Yearbook. Information on 140 countries compiled from CIA reports; includes politicians, geography, defense, agriculture, and trade.
Europa World Yearbook. Published annually by Gale Research, Detroit. Provides comprehensive listing of facts and figures on more than 200 countries. Includes key contacts and information for trade and industry.
Hoover's Handbook of World Business. Published annually by Reference Press, Austin, TX. Provides business contacts including embassies and chambers of commerce, economic and demographic data.
World Factbook. Published annually by the Superintendent of Documents, U.S. Government Printing Office. Provides demographic, economic, and geographic information on every country in the world.
International Directory of Market Research Organizations, 1993, Published by Market Research Society, available through MacFarlane and Co. Inc. Alphabetical listing by country of companies doing marketing research, including location of facilities, product expertise, and contact information.
International Directory of Market Research Companies. Published annually by the New York chapter of the American Marketing Association. Known as the "Green Book." Includes listing of 1500 companies in the U.S. and 65 other countries.
Overseas Business Reports. Published periodically by the Superintendent of Documents, U.S. Government Printing Office. Provides a wide range of economic and business statistics and background information on specific countries.
Asia: A Directory and Sourcebook, 1992, Published by Euromonitor, London, and distributed by Gale Research, Detroit. Major source of marketing information, providing information on all major independent and government organizations.
Doing Better Business in Asia: A Handbook of Checklists and Essential Facts for Corporate Managers, 1988, Published by Business International, NY.
The Eastern European Opportunity: The Complete Business Guide and Sourcebook, 1992, Published by John Wiley & Sons, NY. Provides information on cultural, historical, economic, and political issues.
Central and Eastern Europe Texts Service. Published by the National Technical Information Service (NTIS free catalogue PR-8820). Provides lists of legal and regulatory information on countries in Eastern Europe.
Business International's Guide to Doing Business in Mexico, 1993, Published by McGraw-Hill, NY. Provides information on a number of different topics, including field intelligence, and unwritten rules for business success.
Latin American Markets: A Guide to Company and Industry Information Sources, 1992, Published by Washington Researchers, Ltd., Washington, DC. Includes information on government regulators.
Middle East and North Africa. Published annually by Europa London. Distributed by Gale Research, Detroit. Provides information on physical and social geography, recent history and economy.
Directory of European Industrial and Trade Associations, 1991, Published by CBD Research, Ltd. Distributed by Gale Research, Detroit. Provides information on 6000 industrial and trade associations.
European Consultants Directory, 1992, Published by Gale Research, Detroit. Lists more than 7500 consultants covering such areas as marketing, health, and politics in 27 countries across Western and Eastern Europe.
The United States-European Community Trade Resources, 1993, Published by John Wiley & Sons, NY. A directory of international business and trade resources, including agencies, services, institutions, and private companies.

^aSimilar agencies must be consulted in other countries.

governmental regulatory agencies, and the host-country embassy. See Table 1 for a list of resources that will provide a starting point for host-country information gathering.

2. Importation, exportation, and within host-country transportation regulations must be understood and adhered to. Researchers should become familiar with the practical issues involved in importation and customs "expediting" and potential implications for their own company. It is imperative to seek consultation from the company's legal resources to remain consistent with company policy.
3. Health regulations and the regulatory status of all ingredients must be identified and

appropriately addressed by the research plan. Approved testing protocols may be required. Legal releases, jurisdiction of regulatory boards, monitoring standards, and reporting requirements may apply in circumstances involving the use of products or ingredients lacking “GRAS” (generally recognized as safe) or equivalent status for that country.

4. Legal issues related to liability regarding health and safety concerns must be addressed, and a risk assessment made. This should be done in conjunction with the host country and corporate legal and regulatory counsel. It is recommended that the researcher works closely with the product development, health, and legal groups within the organization to ensure all requirements outlined in points 1–4 above are met. Researchers should be aware that the requirements are specific to each country. Therefore, a close collaboration with the host company affiliate/vendor is necessary in this process.

B. CUSTOMS AND CULTURE

1. Prior to conducting research in a cross-cultural setting, the implications of religious values and practice, social etiquette, social status, and education level must be understood and taken into account during the test design and execution. These include practices regarding religious observances, holidays, gender differences, disciplinary practices, age-related practices, dietary practices, gift giving, and compensation (Asay and Hennon 1999; Laverack and Brown 2003). These are elements that contribute to what we may think of as a “national character” (Clark 1990). This information is specific to each country. For example, each country’s main practiced religion will determine what days are inappropriate for testing (e.g., Catholic observances in Spain, Mexico, and other Latin American countries, Buddhist observances in some Asian countries). Also, countries differ in what is appropriate compensation for test participation. While in most countries it is acceptable to pay test participants cash or with gift certificates, only gifts are acceptable compensation for test participation in some countries (e.g., Mexico). For more details and for country-specific information the reader is referred to this manual’s appendices, where details are given for specific countries.

Consideration must be given to the verbal and written proficiency of the test population to determine whether a paper questionnaire or a personal interview is the appropriate data collection method. Literacy rates and recommendations from the host company affiliate and vendor should be considered. In some countries where literacy is low, personal interviews versus self-administered tests may be preferred (e.g., Egypt (56 %), Senegal (41 %) (UNESCO Institute for Statistics 1994, www.uis.unesco.org).

Security issues and personal safety concerns must be addressed for all participants. In the U.S., consult with the U.S. Embassy and the U.S. State Department for advisories, corporate security, and local employees (in other countries, consult similar agencies). Develop an understanding of the local nature of security issues, as adjacent neighborhoods may differ greatly in personal risk.

The target population must be identified. The researcher must determine if the appropriate target population in the host country is of the same demographic profile as in the home culture.

The most appropriate geographical location to represent the target consumer population must be identified.

C. TEST DESIGN AND EXECUTION

The following are some key considerations in the design and execution of consumer product tests across cultures and countries. Please refer to Sections IV–VI for more detailed information.

1. Local on-site consultants, field agencies, and local company employees can provide invaluable language and translation services, and cultural insights to facilitate the planning and execution of product research in the host country. Locating on-site consulting and field agency resources can be facilitated by the use of international registries of consumer research agencies. See Table 2 for a list of international and country-specific organizations that can help the researcher identify appropriate global or local suppliers. In addition, other organizations that can be helpful in identifying local testing agencies are provided in the appendices.
2. Implement quality control practices, such as the review of the consumer databases, facility test characteristics, etc., to ensure that the agency assisting on host location fully understands the researcher’s instructions and is implementing them adequately. Monitor the test facility performance and provide feedback to assure compliance.

TABLE 2—List of associations and organizations that are associated with marketing research or research with consumers or the public.

INTERNATIONAL ORGANIZATIONS

- AEMRI—Association of European Market Research Institutes
- ALAMO—Latin American Association for Marketing and Opinion Research
- AMA—American Marketing Association
- APMF—Asia Pacific Marketing Federation
- EFAMRO—European Federation of Associations of Marketing Research Organisations
- EFMA—European Financial Management and Marketing Association
- EMC—European Marketing Confederation
- EMRO—European Media Research Organisation-Secretariat
- EPhMRA—European Pharmaceutical Marketing Research Association
- FIPP—International Federation of the Periodical Press
- IAA—International Advertising Association
- MACHK—Marketing Association of Chinese Mainland and Hong Kong SAR
- Marketing Research Institute International
- WAN—World Association of Newspapers
- WAPOR—World Association for Public Opinion Research
- WFA—The World Federation of Advertisers
- WMA—World Marketing Association

ARGENTINA

- Asociación Argentina de Marketing
- Cámara Argentina de Anunciantes
- CEIM—Cámara de Empresas de Investigación de Mercados
- SAIMO—Sociedad Argentina de Investigadores de Marketing y Opinión

AUSTRALIA

- AMRO—Association of Market Research Organisations
- Australian Association of National Advertisers
- Australian Marketing Institute
- MAANZ—The Marketing Association of Australia and New Zealand
- The Market Research Society of Australia Ltd.

AUSTRIA

- VMÖ—Verband der Marktforscher Österreichs

BELGIUM

- Belgian Management and Marketing Association
- FEBELMAR—Belgian Federation of Market Research Bureaus
- The Marketing Foundation—Stichting Marketing
- UBA—Union Belge des Annonceurs

BRAZIL

- ABA—Associação Brasileira de Anunciantes
- ABIPEME—Associação Brasileira dos Institutos de Pesquisa de Mercado
- ANEP—Associação Nacional de Empresas de Pesquisa
- SBPM—Sociedade Brasileira de Pesquisa de Mercado

BULGARIA

- Bulgarian National Association of Marketing Researchers

CANADA

- ACA—Association of Canadian Advertisers L'Association Canadienne des Annonceurs Inc.
- CAMRO—Canadian Association of Marketing Research Organizations

CHILE

- AIM—Asociación Nacional Empresas de Investigación de Mercado
- Asociación Nacional de Avisadores

CHINA (PEOPLES REPUBLIC)

- China Enterprise Confederation
 - China Marketing Research Association
 - Hong Kong Institute of Marketing
 - The Marketing Research Society of Hong Kong
-

TABLE 2— (Continued.)

COLOMBIA	<ul style="list-style-type: none"> • Asociación Nacional de Anunciantes “ANDA”
CROATIA	<ul style="list-style-type: none"> • CROMAR—Croatian Marketing Association (Hrvatsko Druvstvo za Marketing)
CYPRUS	<ul style="list-style-type: none"> • Association of Opinion Poll and Market Research Enterprises of Cyprus (SEDEAK)
CZECH REPUBLIC	<ul style="list-style-type: none"> • CIMA—Czech Institute of Marketing • CSZV—Czech Association for Branded Products Section of Advertisers & Marketing Committee • Czech Marketing Association • SIMAR—Association of Market Research Agencies Sdružení agentur pro vyzkum trhu
DENMARK	<ul style="list-style-type: none"> • Danish Marketing Association—The Market Research Club Dansk Markedsforingsforbund—Markedsanalyseklubben • Dansk Annoncorforening—Association of Danish Advertisers • FMD—The Association of Market Research Institutes in Denmark Foreningen af Markedsanalyseinstitutter i Danmark
FINLAND	<ul style="list-style-type: none"> • The Association of Finnish Advertisers—Mainostajien Liitto • FAMRA—Finnish Association of Marketing Research Agencies—Suomen Markkinatutkimusliitto Ry • Finnish Marketing Research Society—Suomen Markkinointitutkimusseura ry Suomen Markkinointitutkimusseura Ry • The Marketing Research Section of Finnish Marketing Federation Suomen Markkinointiliitto/Tutkimusjaosto • SML—Finnish Marketing Federation Suomen Markkinointiliitto
FRANCE	<ul style="list-style-type: none"> • ADETEM—l’Association Nationale du Marketing Recherche-Stratégie-Action. French Marketing Association-Reconnue d’Utilité Publique • AFM—Association Française du Marketing • DCF—Les Dirigeants Commerciaux de France • IREP—Institut de Recherches et d’Etudes Publicitaires • SYNTEC Etudes Marketing et Opinion • UDA—Union Des Annonceurs
GERMANY	<ul style="list-style-type: none"> • ADM—Arbeitskreis Deutscher Markt-und Sozialforschungsinstitute e.V. • BVM—Berufsverband deutscher Markt-und Sozialforscher e.V. • OWM—Organisation Werbungtreibende im Markenverband
GREECE	<ul style="list-style-type: none"> • AGMORC—Association of Greek Market and Opinion Research Companies • Greek Advertisers Association • HIM—Hellenic Institute of Marketing
HUNGARY	<ul style="list-style-type: none"> • HMA—Hungarian Marketing Association • Hungarian Market Research Association—PMSZ
ICELAND	<ul style="list-style-type: none"> • Association of Icelandic Advertisers
INDIA	<ul style="list-style-type: none"> • The Indian Society of Advertisers • Institute of Marketing & Management • MRSI—The Market Research Society of India
INDONESIA	<ul style="list-style-type: none"> • The Advertisers Association of Indonesia • Indonesia Marketing Association Asosiasi Pemasaran Indonesia

TABLE 2— (Continued.)

IRELAND

- AAI—Association of Advertisers in Ireland
- AIMRO—Association of Irish Market Research Organisations
- IAPI—Institute of Advertising Practitioners in Ireland
- The Marketing Society
- MII—The Marketing Institute of Ireland

ISRAEL

- Advertisers Association of Israel

ITALY

- ADICO—L'Associazione Italiana Direttori Commerciali e Marketing Managers
- AISM—Associazione Italiana Marketing
- ASSIRM—Associazione tra Istituti di Ricerca di Mercato, Sondaggi di Opinione, Ricerca Sociale
- UPA—Utenti Pubblicità Associati

JAPAN

- JAA—Japan Advertisers Association Inc.
- JMA—Japan Marketing Association
- JMRA—Japan Marketing Research Association

KENYA

- Marketing Society of Kenya

KOREA

- KAA—Korea Advertisers Association
- KOSOMAR—Korean Society of Opinion and Marketing Research

LEBANON

- Lebanese Association for Marketing and Advertising (Lebanon Chapter—WFA)

MALAYSIA

- Institute of Marketing Malaysia

MEXICO

- AMAI—Asociación Mexicana de Agencias de Investigación de Mercados y Opinión Pública

MONGOLIA

- Mongolian Marketing Association

MOROCCO

- Groupement des Annonceurs du Maroc

THE NETHERLANDS

- NVvM—Nederlandse Vereniging van Marktonderzoekers
- NIMA—Nederlands Instituut voor Marketing
- VMO—Vereniging van Marktonderzoekbureau
- Stichting National Onderzoek Persmedia (National Readership Organisation)
- Association of Dutch Advertisers—BVA/Associatie Nederlandse Adverteerders
- MarktOnderzoekAssociatie.nl

NEW ZEALAND

- AMRO—Association of Market Research Organisations
- ANZA—Association of New Zealand Advertisers Inc.
- The Market Research Society of New Zealand Inc.

NORWAY

- ANFO Annonsoforeninger
- The Norwegian Marketing Research Society—Norsk Markedsanalyse Forening

PAKISTAN

- Marketing Association of Pakistan
- MRSP—Marketing Research Society of Pakistan
- The Pakistan Advertisers Society

PARAGUAY

- Cámara de Anunciantes del Paraguay

PERÚ

- APEIM—Peruvian Association of Marketing Research Organizations. Asociación Peruana de Empresas de Investigación de Mercados
- Asociación Nacional de Anunciantes del Perú

TABLE 2— (Continued.)

THE PHILIPPINES	<ul style="list-style-type: none"> • MORES—The Marketing and Opinion Research Society of the Philippines, Inc. • Philippine Marketing Association Inc.
POLAND	<ul style="list-style-type: none"> • Forum of Advertisers in Poland—Forum Reklamodawców • OFBOR—Polish Association of Public Opinion and Marketing Research Firms Organizacja Firm Badania Opinii i Rynku • PTBRiO—Polish Society of Market and Opinion Researchers Polskie Towarzystwo Badaczy Rynku i Opinii
PORTUGAL	<ul style="list-style-type: none"> • APODEMO—Associação Portuguesa de Empresas de Estudos de Mercado e de Opinião • APAN—Associação Portuguesa de Anunciantes • APPM—Associação Portuguesa dos Profissionais de Marketing Sociedade Portuguesa de Comercialização
PUERTO RICO	<ul style="list-style-type: none"> • Asociación Puertorriquena de Empresas de Investigación de Mercado y Opinión Pública
ROMANIA	<ul style="list-style-type: none"> • SORMA—Romanian Society for Marketing and Public Opinion Research
RUSSIA	<ul style="list-style-type: none"> • Association of Russian Advertisers • The Russian Marketing Association • Russian Association of Public Opinion and Marketing Research
SINGAPORE	<ul style="list-style-type: none"> • Market Research Society • Marketing Institute of Singapore • Singapore Advertisers Association
SLOVAK REPUBLIC	<ul style="list-style-type: none"> • SAVA—The Slovak Association of Market Research Agencies Slovenská asociácia vyskumnych agentúr
SLOVENIA	<ul style="list-style-type: none"> • Slovenian Marketing Association—Drustvo za Marketing Slovenije • SOZ—Slovenian Advertising Chamber. Slovenska Oglasevalska Zbornica
SOUTH AFRICA	<ul style="list-style-type: none"> • Association of Marketers • IMM—Institute of Marketing Management • SAARF—South African Advertising Research Foundation • SAMRA—The Southern African Marketing Research Association
SPAIN	<ul style="list-style-type: none"> • AEA—Asociación Española de Anunciantes • AEDEMO—Asociación Española de Estudios de Mercado, Marketing y Opinión • ANEIMO—Asociación Nacional de Empresas de Investigación de Mercados y de la Opinión Pública • Federación Española de Marketing
SRI LANKA	<ul style="list-style-type: none"> • The Market Research Society of Sri Lanka • Sri Lanka Institute of Marketing
SWEDEN	<ul style="list-style-type: none"> • The Association of Swedish Advertisers Annonserföreningen • FSM—The Association of Swedish Market Research Institutes. Föreningen Svenska Marknadsundersökningsinstitut • SMIF—Föreningen Svenska Marknads-informationsföretag • SMUF—The Swedish Market Research Buyers Society. Sveriges Marknadsundersökningsköparens Förening • Swedish Marketing Federation—Sveriges Marknadsförbund Service AB

TABLE 2— (Continued.)

SWITZERLAND	<ul style="list-style-type: none"> • SÖK—The Swedish Market Research Society Sveriges Marknadsundersökare och Marknadsanalytiker • SWISS INTERVIEW—Vereinigung Schweizer Markt-und Meinungsforschungs institute/Association Suisse des Instituts d’Etude de Marché et Sondages d’Opinion • GfS—Schweizerischen Gesellschaft für praktische Sozialforschung (Swiss Society for Applied Social Research) • ISOP—Institut Suisse de l’Opinion Publique • GfM—Schweizerische Gesellschaft für Marketing • GREM—Groupement Romand du Marketing • SMC—Schweizerischer Marketing Club • SMS—Verband Schweizer Marketing -und Sozialforscher
THAILAND	<ul style="list-style-type: none"> • Marketing Association of Thailand • Thailand Marketing Research Society (TMRS)
TURKEY	<ul style="list-style-type: none"> • Turkish Advertisers Association—Reklamverenler Derneği • Turkish Association of Marketing and Public Opinion Research
UNITED KINGDOM	<ul style="list-style-type: none"> • The Market Research Society • AMSO—Association of Market Survey Organisations • AURA—Association of Users of Research Agencies • BMRA—British Market Research Association • CIM—Chartered Institute of Marketing • Incorporated Society of British Advertisers • Interviewer Quality Control Scheme (IQCS) • The Market Research Society • The Marketing Society
U.S.A.	<ul style="list-style-type: none"> • AAPOR—American Association of Public Opinion Researchers • ACR—Association for Consumer Research • AMA—American Marketing Association • ANA—Association of National Advertisers Inc. • APA—American Psychological Association • ARF—Advertising Research Foundation • ASA—American Statistical Association • CASRO—Council of American Survey Research Organizations • CMOR—Council for Marketing and Opinion Research • COPAFS—Council of Professional Associations on Federal Statistics • MRA—Marketing Research Association, Inc. • MSPA—Mystery Shopping Providers Association • NAA—Newspaper Association of America • NAB—National Association of Broadcasters • NCPP—National Council on Public Polls • PMRS—Professional Marketing Research Society • QRCA—Qualitative Research Consultants Association Inc. • RIC—Research Industry Coalition • TTRA—The Travel and Tourism Research Association
UKRAINE	<ul style="list-style-type: none"> • Ukrainian Marketing Association
URUGUAY	<ul style="list-style-type: none"> • ADIMU—Asociación de Investigadores de Mercado y Opinión del Uruguay • ADM—Asociación de Dirigentes de Marketing de Uruguay (Comisión de Estudios de Mercado) • Cámara de Anunciantes del Uruguay—National Chamber of Advertisers
VENEZUELA	<ul style="list-style-type: none"> • Asociación Nacional de Anunciantes Venezuela • SOVIMO—Sociedad Venezolana de Investigadores de Mercado y Opinión

TABLE 2— (Continued.)

YUGOSLAVIA

- YUMA—Yugoslav Marketing Association
- JUMA—Jugoslovensko udruzenje za marketing

ZIMBABWE

- Association of Zimbabwe Advertisers

3. Translations for questionnaires and instructions must be developed. Back translation (translating the questionnaire back to its original language) is essential to validate appropriate translation of the ballot. It may be necessary to conduct a local pilot study to adequately refine the translation to meet the needs of the test. The reader is referred to Section V (questionnaire design) for more details on the design of questionnaires.
4. The appropriateness of the methodology, questions, and sensory scales for the target population must be determined. A local pilot study may be used to choose the appropriate methods for the selected population.
5. The transportation and communication infrastructure must be understood in sufficient detail to assess how it might affect the design and execution of the research. Lack of home phones or personal transportation will profoundly influence how research must be conducted. Product storage, preparation, and refrigeration requirements must be considered. As indicated in this manual's appendix for the Republic of India, the country is hot and humid and most sites do not have adequate refrigeration. Therefore, if needed for the test products, researchers should use specialized couriers for shipment and storage of products. In addition, if needed, chopped ice must be acquired to ensure proper product storage.
6. Environmental conditions (e.g., weather, terrain) that may impact product distribution and product quality must be anticipated and addressed.
7. Realistic time estimates must be developed, with flexibility and contingency plans incorporated into a research plan.
8. The decision to source ingredients and test samples locally or from the home country must reflect a balance of health, regulatory, and research-validity concerns.

IV. TEST DESIGN AND PLANNING

It is critical for the test design and protocol development of a consumer product test across cultures and countries to have a clearly established and agreed-upon objective. For each region participating in the testing, a local test coordinator, if available, (from a regional affiliate) should be selected who understands the objective and ensures test alignment within that region. If no regional affiliate will participate, a local research vendor or a company in the host country who works with international vendors should be selected. This coordinator also provides facilitation with regional suppliers. A research plan or protocol should be written, including a timetable and success criteria. The initial draft of the test design should be written and shared with all research coordinators to get additional input to ensure continued cooperation.

Researchers should contact their company resources, which may include product development, legal, sales, advertising, marketing, regulatory, packaging, shipping and handling, and the travel office, or combinations thereof. Advise them of the intended project and be fully aware of the assistance they can provide.

A. INITIAL INTERACTION WITH TEST FACILITY OR LOCAL VENDOR

For detailed coverage of initial interaction issues see Preliminary Issues, Section III.

1. Local Affiliate

The importance of working closely with an affiliate or research vendor, or both, within the host country cannot be overstated. The affiliate sensory and marketing group in the host country should be contacted at the very beginning of the research, when available. They will be a valuable resource and a potential partner in the study(ies). The affiliate colleagues may be responsible for the testing in their countries and helping identify a local vendor.

The researcher should become familiar with the level of knowledge, the methodology, and testing philosophy of the company affiliate's professionals in the host country. The recommendations for the best approach to follow given the culture and local idiosyncrasies should be separated from methodology preferences. Because host professionals are most familiar with their country, their opinion on the most appropriate approach for that country should be considered. These opinions have more weight if the host professionals have sufficient consumer research experience and can back up their recommendations with the successful outcome of previous studies. However, if their recommendations stem from mere opposite preferences, an open discussion of advantages and disadvantages of different approaches should be held so the best testing approach is selected. Noteworthy is the fact that if the company affiliate will be responsible for the test in terms of resources and finances, the host professionals may be the ones determining the approach to follow.

2. Local Vendors

Research vendors will work closely with the primary researcher to execute the study in the host country. They will offer input in the final test design and parameters and will be able to explain typical testing methods used in the host country.

When conducting studies in multiple countries, or a single country with a diverse population or geographic region, it is recommended that a research firm with multi-national or regional affiliations, or both, be selected to provide total coordination of the study across regions. The advantage is a single point of communication for all testing considerations.

3. Local Government

Some countries have agencies that oversee testing. If the host country has such agencies, it is important for the primary researcher or local affiliate to be in communication with the appropriate government agency. In addition, it is important that local government agencies be contacted to check regulations regarding shipping, labeling, product storage, consumption and testing, etc.

B. MATERIALS NEEDED AND ISSUES TO BE CONSIDERED PRIOR TO TESTING

1. Translation

All documents should be translated by a reliable source such as the research vendor. Be certain that all documents, including product information, reflect the original meaning rather than a word-to-word translation. Have a second qualified person, fluent in the specific language or dialect, back translate to assure the original meaning. A local affiliate may also proofread the translation. Wording must be clear for all readers. In addition, an established testing agency in the host country can provide guidance regarding which attributes and scales are appropriate for the culture being tested. A literature review should also be completed, when appropriate. For example, Yao et al. (2003) found that Japanese and Koreans use a smaller range of the hedonic scale compared to American consumers.

2. Cost Estimates

Send documentation of study specifications when requesting cost proposals. This written information will assure that all potential vendors receive the same information. Identify the common currency and the specific exchange rates (www.x-rates.com/calculator.html) to be used for all bids to avoid miscalculation.

3. Proper Agreements

The company affiliate or local vendor and the appropriate local government agency should be contacted regarding the necessary paperwork for the study. Documents may include confidentiality agreements, ingredient list, safety records, release forms, screener, consent forms, test protocols, or questionnaires, or a combination thereof.

4. Test Products

Confirm with the appropriate internal company individuals (i.e., Product Development, Regulatory Affairs) that all ingredients are approved for use in the host country(ies). Regulations frequently differ. Ensure that contacts have expertise specific to the test locales. Consult the affiliate or vendor in the host country for additional information. Also take into account the time required for the product to clear customs when shipping into the country.

5. Methodology

Be aware of standard methodologies in targeted test countries. For some, Home Use Testing (HUT) is the standard, while others favor Central Location Testing (CLT). Consult the affiliate or local vendor for additional information.

6. Logistics

Document the exact logistics of how the test should be conducted. Proper screening, instructions, and test execution will depend on complete and accurate documentation of the methodology to follow.

7. Timing

Be aware of the host country's official and religious calendar. Holidays and the accompanying celebrations are often unique to individual countries. Holiday seasons and popular vacation times should be avoided. Weather conditions and their effect on the population, life style, product, or product use also must be considered.

8. Other Cultural Issues

Test planning needs to consider the effects of religious beliefs, social class, etiquette, and availability of the target consumer as well as many other cultural issues. This manual's appendices cover cultural-specific information for several countries.

9. Results

Be very clear to the vendor in the host country regarding the identity of the primary client, the primary recipient of the data/results, who will be responsible for further distribution of the data/results, whether raw or analyzed data are to be returned, how the data will be formulated, and the timing expectations.

C. TEST DESIGN AND PROTOCOL DEVELOPMENT

1. Product Issues

(a) Products Included in Test

The test objective determines which products should be included in the test. In tests across cultures, a global standard may be tested as a control. The global standard could be a competitive product, the company's own most popular product, or a specially made control for which there is a substantial database of product consistency and consumer acceptance. Local standards may be included but not substituted for the global control. Substitution of the global control could cause a lack of data comparability. Researchers are challenged to consider all psychological and context effects involved in the presentation of test products, particularly when new products are tested. Qualitative research is highly recommended prior to any quantitative test when testing new products that are indeed foreign in the host country. This research can provide valuable insights into consumer reactions to these very new and unique foreign products. Specifically to fully interpret test results and make sound business decisions, researchers should have enough information to be able to separate if low product acceptance is the result of unfamiliarity with the product, or if it indeed reflects low product quality and acceptance reactions. Cross-cultural consumer research studies have shown that familiarity with the products affects their acceptance (Suknark et al. 1998).

(b) Product Acquisition and Handling

(1) Purchasing Product Within a Test Country or Region

Product may be purchased within the host country/region, or a specific country where readily available. This can be carried out by the test agency, the regional affiliate, or by a professional pick-up service located in the testing region. Criteria for purchase might include quantities, product age, package size, package type, location of manufacture, and location of purchase (e.g., city) as well as store type. It is advisable to request same-lot number for the product purchased whenever possible or practical.

Research on the market and product availability may be necessary, if not already known. Often, large quantities of product may be obtained through a distributor. Schedule of the study may be influenced by the time it takes to source the product.

Products being purchased should be in good, clean condition, free from dirt, debris, or dents,

and must be fully sealed. All relevant product information should be recorded, including lot number and freshness dating, if applicable.

(2) Production of Products

It is necessary to consider various aspects of the product's formulation, especially when it is manufactured for the test. The product may be produced in one country or in each of the countries where testing will be completed. The product may differ from country to country in approved ingredients, raw materials, coloring agents, sweeteners, preservatives, allergens, shelf life, or approved packaging. Product variations may exist due to varying ingredients, production locations, and suppliers. The ingredients approved for use within and between locations may vary.

It is strongly recommended that all product(s) be reviewed prior to the start of testing to ensure they meet all specifications in the test design (size, container, color, etc.). If time and regulations permit, samples should be shipped to a common central test coordination site for evaluation. Individuals familiar with the product design and quality should authorize the actual product(s) for the test. It is the responsibility of the researcher to determine the appropriateness of the samples. Retained samples should be sent to the appropriate groups, inspected if necessary, and stored as needed.

Some products require the purchase of a carrier, such as crackers for cheese or brushes for toothpaste. Carriers that are typical of the region where testing is occurring should be used.

(3) Packaging

Packaging Within the Country of Testing

Whether the product is to be repackaged after it has been received from another location or is produced in the host country, a sample run should be completed and sent to the test coordinator for approval.

Packaging Materials/Labels

Materials used in the home country may not be available or legal in the host country (e.g., materials affecting environmental issues in the host country). Materials in some instances have different common names. Detailed packaging requirements should be specified in scientific and chemical terms, whenever possible. A sample should be shipped to the test originator for inspection before agreeing to a full-scale packaging or re-packaging effort.

Product labeling must meet local legal requirements. The potential for packaging color to have symbolic significance in a country must be considered (e.g., white could mean purity or death depending on the culture, while black could be associated with mourning or death). If relevant for the country, this manual's appendices cover this topic. It is recommended that the researcher works closely with the company affiliate or local vendor to find out any special considerations regarding the use of certain colors.

(4) Product Quantity and Size

Several factors have an effect on the total amount of product needed, such as serving size or usage of the product, type of test (e.g., central location, home use, or focus group), length of time in home testing, etc. Cultural issues that affect usage should also be considered. Additional amounts need to be considered if product change or losses are anticipated.

Once all of the above have been established, the total amount of product to be purchased can be determined. Plan for a minimum of 10 % over the amount needed. This may be further increased if the product is highly perishable or breakable.

(5) Product Age

The age of the product will depend on the project schedule. Establish the product's age based on the actual time of use in the test. This will be influenced by the length of time to purchase, ship, repackage, and test.

All products should be of comparable age and within the shelf life. Develop guidelines for age ranges that can be used when purchasing the samples for the test.

2. Product Shipment

Whether product is being reshipped within the host country or packaged in the home country and shipped to the host country, shipment, customs, receiving, and storage issues must be addressed.

(a) Shipping Issues

(1) Physical Protection

Materials must be able to withstand actual shipping conditions (pressure change, physical abuse, temperature, etc.) as well as storage conditions within the host country. The amount of time in each climate/condition will affect the product, especially if perishable.

(2) Air Pressure

Many carriers do not pressurize the cargo hold, which allows dramatic pressure changes that can affect the product. Air sealed in packages will expand and can cause packages to leak or burst.

(3) Type of Transit

Type of transit (air, water, land, truck, bicycle, motorcycle, foot, etc.) must be determined and arranged keeping in mind that the choice may influence the time required to deliver the product. Transit type can ultimately determine the packaging material necessary to protect product to its final destination.

(4) Shipping Containers

Anticipate the effects of climate, temperature, transit conditions, and customs procedures on the shipping containers. Maximum and minimum size limitations may vary by shipping company. Large packages may be difficult to handle by the receiving party.

(5) Package Address

Every country has a standard format for labeling and addressing. Make special note of how the recipient is addressed. The name used in conversation may not be the proper name to use on the address label.

(6) Legal Claims

Local governments have specific laws regulating claims on packages. These may change from region to region as well as between countries. For example, “single serving size” or benefit claims such as “fortification” may be different from country to country.

(7) Container/Carton Labeling

Each country on the shipment route will have specific laws regarding the content labeling. Hazardous materials, such as dry ice, are regulated by law in most countries, and if permitted, may require special labels.

(8) Tracking Capability

Most major shipping companies offer tracking capabilities. It may be necessary to track package movement if the product becomes delayed or lost. Notify the local contact of shipping date, mode of transit, expected arrival date, and all relevant tracking numbers. Monitoring of the product in transit may be necessary for environmental changes, i.e., temperature.

(9) Insurance

Estimate value of product accurately and require the carrier to insure the package(s) against damage, loss, and late delivery.

(10) Multiple Shipments

Consider sending product/testing supplies in multiple small lots to protect against theft, loss, seizure, or rejection.

(b) Customs

Understand the customs procedures for each country through which the package will travel. Know what inspections and labeling is required. Declaration such as, “NOT FOR SALE—ONLY FOR RESEARCH PURPOSE” may hasten the process of Customs clearance. Release criteria may vary by country and should be checked and verified well in advance for each test. Packages that are easy to open with clearly labeled contents are least likely to be stopped by customs officials.

If the product is perishable, special arrangements for controlled storage should be made with the customs office. In some cases, a “customs” broker may be needed to facilitate the safe and timely clearance of the products. This can aid the process since the broker works directly with government employees.

(c) Receiving and Storing Products at the Test Facility

The storage space must be dry, with temperature and humidity sufficiently controlled to avoid negatively changing the product's properties. The storage space must be suitable for the product and large enough to hold the entire test product. The space must be contained, locked, and monitored while product is in storage. Quarantine certification may be required for the storage space. Ideally, this should be short-term storage ranging from overnight to two weeks.

When product is checked in to the secured space, it should be inspected for product and package damage, label integrity, missing labels, smeared print, broken packages, off color, odor or flavor that may be obvious when the packing crate is opened. Retain samples of each shipment after receipt to address possible questions about product integrity after shipment. Total receipts should be recorded and reconciled with shipment records.

3. Test Materials Obtained in Host/Test Country

Availability of competitive or current company product to be used as the control must be assessed early in the test planning. This product may require repackaging, coding, or relabeling before testing, which may require shipment to a third site.

(a) Questionnaires

For details on questionnaire design and language issues, see Questionnaire Issues, Section V of this document.

It may be necessary to reproduce the questionnaires in the test facility, requiring a copier and paper. Computer equipment may be available to facilitate data entry (direct or from paper questionnaires). This equipment should be inspected before the start of the test to assure adequate functioning.

(b) Water and Paper Products

Water and paper products may vary across locations. It may be necessary to source these materials from a single supplier to assure consistency within the test.

(c) Product Preparation, Serving Material, and Equipment Needs

When products need to be prepared on-site (CLT) or by the consumer (HUT) in a foreign country, a considerable amount of planning and pre-testing must be completed. When product preparation is involved, two main issues need to be determined: (1) what the local preparation practices in the host country are, and if different from those in the home country, and (2) special equipment, utensils, and overall testing conditions required in the preparation and serving of test products.

(1) Local Conditions and Practices

When product preparation is involved, researchers must become familiar with the way the test products are usually consumed or used in the host country. If the product preparation or usage is very different in the host country, the research team should make decisions on how the products will be prepared/used. The research team may follow its own preparation protocols if the product is to "differ" from local available products and will be marketed with those special and different preparation/usage instructions. Alternatively, the team may decide to adapt its preparation/usage practices to the local conditions. Then the implication is that the product tested and marketed will be different, since it is being adapted to the country-specific usage conditions. For example, puddings may be stiffer and firmer in the host country because the common local practice may be to use less water/milk in the preparation. A company may decide to modify its regular preparation conditions to be able to test puddings that fit the country's texture preferences.

(2) Special Equipment, Utensils, and Needed Testing Conditions.

Researchers need to assess the equipment, utensils, and overall testing conditions needed in the preparation and serving of test products. The ideal test conditions, equipment, and materials may not be feasible or available in the host country. Therefore, one or more of these activities may be required:

- Shipment or purchasing of necessary materials or equipment (e.g., specific serving cups, mixers, coffee makers, televisions to show advertising clips, etc.)
- Adaptation of the local equipment and utensils to fit the required preparation conditions (e.g., electric needs, new parts or components). In this case, product preparation runs or pre-testing must be completed to assess if the resulting products have the desired

characteristics. It is important to record any product differences observed under local preparation conditions and take this information into account in the data interpretation.

4. Test Characteristics and Logistics

(a) Test Type

When the research involves multi-country tests, the same test design should be used in all countries. The test coordinator should facilitate agreement among all countries. Products may vary by region but the test design must include a subset of consistent products, and when appropriate, a global control, so that differences in product acceptance across regions can be assessed.

(b) Placement

Local conditions need to be assessed to determine how products will be tested. The execution of Central Location Tests (CLTs) do not involve product placement, thus effective recruitment and test administration will ensure a successful outcome. A challenge may be posed in the execution of Home Use Tests (HUTs) as it involves product placement at the consumers' homes. While in some countries it is common to have consumers pick up products at the test facility to use at home, in other countries a different product placement needs to be completed. For example, researchers may have to use door-to-door placement, mail delivery/shipment, delivery of products to a central community location (e.g., school, church, municipal building). The local affiliate or vendor, or both, will be able to recommend the best product placement procedure for the host country.

Depending on the objective, the research study can be conducted as a Central Location Test, door-to-door placement, mail delivery, or product pickup by the consumer, i.e., post office. Whenever possible, the type of test should be consistent from country to country. However, sometimes, different venues need to be used in some countries. It sometimes takes creative measures to reach the desired consumer.

(c) Follow-up

Follow-up procedures, including retrieval of questionnaires, diaries, or product, or a combination thereof, may be affected by phone availability, literacy rate, and cultural issues. For example, it would be a bad strategy to request the return of a used item which was considered a "gift." Questionnaire follow-up may require home visits by an in-person interviewer to ensure that self-administered answers are reliable and valid.

5. Recruitment Mechanics/Procedures

Recruitment of test subjects is very important. A local representative or agency can help with understanding class systems, cultural anomalies, household makeup, availability of target consumers, and other demographics.

(a) Target Population

The interviewer may be required to go to the target consumer as the individual may not be accessible outside the home. The gender of the interviewer may need to be specified based on the situation and culture. Special accommodations may be required for other family members (child care, transportation, etc.) to reach the target consumer adequately.

(b) Recruitment/Contacting Procedures in a Different Country

The recruitment procedures must be sensitive to social structure and religious behavior, e.g., in some countries consumers are not allowed to leave the household to participate in an off-site test, or females may not be interviewed by a male. Procedures may include cold calls with no database available, direct mail, or affinity groups such as religious, educational, business or sporting groups, or a combination thereof.

The amount of time required to recruit will vary with the method available to the culture and the host country and must be a part of the planning process. Test type, holiday schedules, time of year, and weather conditions are also major factors. The number of recruits required may be dependent on the consumer contact method. For example, use of a special interest group may provide a greater number of consumers more quickly than cold calls that can only be made to a specific individual through a translator or liaison. Language and dialect differences within cultures and countries can extend recruiting time.

(c) Incentives

Incentives are a key factor in attracting and maintaining consumers in the western culture. In some cultures/religions, incentives may be an insult, requiring other ways to acknowledge consumers for their participation. Monetary payment with cash, certificates, or check may require tax reporting. Alternative incentives could be goods or services available to the consumer. The amount of the incentive will vary by country and should be determined based on standards of living for each country.

(d) Legalities/Consents/Liabilities

In general, age, gender, and food allergy restrictions are the foremost considerations. Testing with children may require written consent from the parent or guardian. In some cultures, religious consent may also be required for adults. Written records of all consents are essential. Consent retention will vary with local requirements. Liability may be minimal or may include company responsibility for the product and its use. Understanding the liabilities and implications is very important.

D. PILOT TEST**1. Objectives for Pilot Testing**

It is recommended that a pilot test be conducted prior to the main study. Pilot testing ensures the quality of the planned cross-cultural consumer research with specific emphasis on:

- (a) Logistics: to assure that the recruitment form and incidence rates are as expected and that the execution of the research, including product preparation (if applicable) flows smoothly.
- (b) Communication: to test that execution details are clearly communicated between the test designer, the test administrator, and the consumer.
- (c) Product Supply: to confirm that adequate product is available for testing purposes.

2. Recommendations

- (a) Ideally the pilot test should be completed in the host country with the targeted consumer group. If this is not feasible, a similar type of group/culture may be used in other countries, but caution is required to recognize that there may be differences between the pilot consumer group and consumers in the native country. This may require the use of recruitment criteria that specify the length of stay in the original (intended) country or in the host country to determine if consumers qualify. While conducting the actual test outside the host country is not recommended, it is acceptable to conduct the pilot test in another country. This pilot test is meant to provide a final check on test protocol, test design, and questionnaire prior to the execution of the actual test in the host country.
- (b) Conduct pilot testing just as the actual test is to be managed regardless of the type of test. For example, if the test is a CLT, arrange for the facility to mimic the actual test.
- (c) Test coordinator/supervisor. An on-site test coordinator is essential to ensure a smooth test execution.
- (d) Consider seasonal differences across regions. Weather conditions may vary due to geographical characteristics, time of the year, etc.
- (e) Conduct exit interviews with some consumers and test administrators to understand the test execution and needed improvements.
- (f) Use information from pilot testing for qualitative learning on methodologies. The quantitative data collected in the pilot study should not be used to predict the outcome of the larger scale testing.
- (g) Allocate enough time between the pilot and larger scale tests to allow for any modifications.

V. QUESTIONNAIRE ISSUES

When one considers the amount of time and thought that is given by researchers in the home country to the development of appropriate questionnaires, it should not be surprising that the same consideration should be given to the development of questionnaires for use in other countries.

A. ATTRIBUTES

Several methods are available for developing questionnaires and specifying the attributes to be used on those questionnaires. These methods differ in complexity as well as usefulness.

Translation of the attributes from one language to another is the easiest and most direct method. However, direct translations can be misleading. Nuances of the language are often missed with the result that the questions are not asking for the same information (Lewis 1997). “Ballot format can be easily translated, however, definitions of attributes may be substantially different” (Karahadian 1994).

1. Cultural Differences in the Use of Words

Prior to translating a questionnaire and finding the most accurate translation of the listed attributes, the researcher should investigate the meaning of these attributes for the target foreign consumer population. This information can only be obtained through qualitative research. Recommended approaches include: one-on-one interviews with consumers from that country (in the host country or in own country with target population), small focus groups, and through conversations with company affiliate’s professionals and vendors in the host country.

A discussion concerning products that are representative of the product characteristic is useful in understanding how this characteristic is described, the meaning of the term, and if the term is appropriate or not appropriate for that culture. For example if “richness” is the intended attribute it is best to present several products that the researcher believes are “rich” and “not rich,” such as full-fat ice cream, cream, salad dressing, beer, chocolate cake, water, crackers, etc. The interaction with the consumer, and the proper use of references/products and interviewing will clarify the meaning of the intended word(s) to the target consumer population.

2. Multiple Translation

Translations into the language and then back into the original language are recommended over a simple one-way translation. Back translation by an independent source is recommended. While this method is better, errors are still possible. This technique assumes that both cultures think about the world in the same way and that the same questions are important to both cultures. For example, while in the U.S. a question about “spiciness” is clearly understood; cultures that use many spices in cooking may not understand a general word such as “spiciness,” but may need specific words for specific spices of interest. Therefore, techniques recommended in (1) above should be used to investigate the meaning of words of interest to the target consumer.

3. Pretesting

Often from discussions, several possible words or translations are provided for an attribute of interest. In order to select the best translation as well as to determine that the attributes chosen are correct and sufficient, pretesting should be conducted.

Products should be carefully chosen to represent differences on the desired attributes. Pretesting will show whether these attributes correctly differentiate products.

B. SCALE TYPE

Questions concerning scale type arise in consumer product tests and research across cultures and countries. These questions include number of categories which should be used, whether to use numbers, whether to word anchor each category or use only end anchors, which words to use to anchor the categories, the universality of the scale (that allow comparisons across cultures using the same scale), etc. Unfortunately, there have been few published studies that have investigated and reported the use of scales in different cultures. Noteworthy is the research completed by Yeh et al. (1998) who investigated the effectiveness of modified hedonic scales for different Asian cultures. Results indicated that Chinese respondents used an unstructured line scale with few word anchors most effectively, whereas Koreans and Thai respondents used a structured 17-point line scale most effectively. Ideally, companies should conduct similar research or pilot studies to determine the best scale to be used in the country of interest. Yao et al. (2003) found that Japanese and Koreans use a smaller range of the hedonic scale compared to American consumers.

This manual’s appendices provide valuable information on recommended scales for specific countries and cultures. This information is intended to aid the researcher in the selection of adequate scales in cross-cultural consumer research studies.

1. Scale Anchoring

(a) End Anchors Versus Anchoring Each Point with a Word

It can be very difficult to anchor each part of the scale in different cultures in a way that ensures that each word is differentiated and equally spaced on the scale. For this reason it is often more realistic to only use end anchors. Curia et al. (2001) found that the fully anchored hedonic scale does not translate adequately in Spanish. These researchers found that in Argentina, better results were obtained when using semi-structured scales. It should not be assumed that because the same scale is used in different cultures that the results will be similar. Some cultures may avoid parts of a scale (e.g., not feeling that it is appropriate to give negative ratings), or the translations for the word anchors may not be equivalent. Yao et al. (2003) found that Japanese and Koreans use a smaller range of the hedonic scale compared to American consumers.

Researchers should assess if other approaches could be used to collect intensity measurements without using scales, such as ranking. While ranking does not provide information on the degree of difference among samples (like scaling does), its use may be more advantageous than the use of scales due to the language and cultural challenges described above.

(b) Use of Numbers

The use of numbers should be assessed for the specific culture and consumer population. For example, some numbers should not be used in some cultures. When it is deemed necessary to avoid the use of numbers on the scale, unstructured scales or word anchors (either at the ends or on each category) could be used. This would avoid problems associated with the use and understanding of numerical scales.

(c) End-anchor Wording

It is important to determine whether the scale being used “makes sense” culturally. For example, a common liking scale in Europe is end anchored from “Don’t Like at All” to “Like Extremely.” This is in contrast to the common hedonic scales which typically run from “Dislike Extremely” to “Like Extremely.” In these cases a small-scale research study of these two scales is needed, since different consumer populations respond differently to different liking scales. Alternatively, the local vendor and local affiliate may offer suggestions on the best scales to use in the host country. This manual’s appendices present recommended scales for each country or culture covered in these documents.

C. BALLOT VALIDATION

The importance of pretesting the choice of scale, attributes, and method cannot be overstressed. Pretesting should include a subset of samples that demonstrate a wide range of differences both on attributes of interest as well as liking. The choices of attributes should differentiate these products appropriately, and there should be distinct differences on liking. The manner in which each scale is being used can be assessed by frequency distributions and variance ratings. Overuse of specific scale points or differences in the variation of scores for products which are rated high or low on the scale can be evaluated.

VI. TEST ADMINISTRATION

A. PARTICIPANTS AND TEST STAFF

1. Participants

(a) Recruitment

The most efficient method of recruitment will vary by country, and in some cases, by region within a country. The researcher should be aware of factors such as the incidence of telephone ownership and the customary uses of the telephone, the existence of shopping malls or alternate gathering locations, e.g., high traffic streets, cultural taboos related to gender and socio-economic status, local customs or legal restrictions on unsolicited contact, or both, and limitations on the type of information that can be collected in the host country. All of these factors will influence the method of recruitment. Seeking the advice of local researchers with expertise in the market is critical to the success of the study. Some compromises may be necessary, but the integrity of the study should not be sacrificed for expediency.

Literacy levels, neighborhood access, and safety (i.e., gated or closed communities), and local customs related to gender, personal space, and formality in the host country will also influence the method of recruitment and data collection.

(b) Respondents and Culture/Customs

The influence of local customs will be evident in all phases of the study. Be aware of regional differences within countries (refer to appendices for specific examples). Dialects and accents may influence the outcome of the research if they are not addressed beforehand. Much care must be taken when developing and communicating instructions. Direct translations are often not possible, and even when the words do translate, they may not convey the intended meaning. Words are also important when dealing with different age groups. For example, “sick” to an Australian teenager in the year 2002 meant fantastic or great. It is worth looking at any local lingo before drafting the questionnaire. Body language may also have an unintended meaning to the respondent.

Punctuality is not paramount in all cultures; therefore, local etiquette may require that some leeway be given in appointments, while boosting the over-recruitment figures. Separation of respondents by gender or socio-economic class, or both, may be necessary with some cultures, and a period of socializing/introduction may be customary prior to beginning the study.

Note that in a class-based culture, if the recruiter is of a higher social class than the potential respondent there may be a tendency to give false responses to screening questions. Compensation should be consistent with local practices. In some cultures, a gift or a meal, or both, are expected rather than monetary compensation.

(c) Interaction with the Respondent During Recruitment and Testing

In some cases it may be desirable to make a videotape or auditory record of the test sessions. Check with local researchers to determine if there are any legal restrictions on these practices and any need to disclose to the respondents that recording is being done in the host country. Someone familiar with the culture should be involved in the interpretation of the recordings to communicate the meanings of nonverbal cues and the reasons for usage of certain words or intonations.

If in-depth interviews or focus groups are being conducted, selection of the moderator is critical. Again, gender interactions, socio-economic class, religious practices, and cultural mores must be considered. A reciprocal comfort level must be established to avoid damaging the validity of the study.

Cultural nuances can have an impact on the way language is used in interviews. Asking indirect questions rather than using direct language may be more appropriate in some cultures, such as in China. Some topics, such as personal hygiene or financial questions, will require particular attention to the sensitivities of the interview participants (see Laverack and Brown 2003; Liang 1966 for discussions). McGorry (2000) has highlighted the difficulties in achieving satisfactory translations of surveys from one language to another, even with the use of back translation to diminish confusion.

2. Staff

(a) Test Administrator/Moderator

It is important to choose the appropriate administrator/moderator to conduct the test. The following guidelines should be followed in order to assure the right person is selected for that task.

- He/she should know and adhere to the customs of that region (e.g., removing of shoes upon entering a home, types of clothing, headwear, and customary actions).
- Influence of an existing hierarchy system should be considered prior to selecting a test administrator. The administrator’s gender, age, status in the community, and rationality could all affect the interaction with the respondents. He/she should be similar in appearance, attitude, and behavior to the respondents and must also have the ability to effectively communicate with the company funding the study.

(b) Monitors and Other Staff

Determine in advance of the study the number of people who will monitor the test. If the study will be in multiple rooms at a central location, several monitors may be needed. If the test is to take place in the home, monitors should only be in the home if it is culturally and socially appropriate. (Note: In a HUT (Home Use Test), the monitors will most certainly change the behaviors of the respondent, so monitoring should be weighed against a more natural test environment.)

For central location tests, rules for eye contact, talking, space between respondents, and number and characteristics of people monitoring the test, should be written and given to the agency in advance. Prior to the study beginning, the agency monitors should read the

procedures to explain their responsibilities and the manner in which they should be conducted. Role-playing can also be helpful.

The number of monitors, the time they will need to be available, and their responsibilities should be stipulated in the contract with the local agency or administrator.

B. SERVING PROTOCOLS

1. Local/Regional Product Issues

It is important not to take cultural differences for granted in any aspect of the testing process. Researchers should determine the level of familiarity that the respondents have with the product in the host country. This includes use or consumption practices such as serving size, temperature, serving containers, etc. All aspects of the use experience should be considered when developing instructions and preparing a product for distribution.

If special equipment is needed for preparation or use of a product in home-use testing, the researcher should at a minimum ensure respondents have the equipment in the home or record how the product was used, prepared, served, etc. The researcher may provide special instructions, tools, or equipment to increase respondents' compliance with special instructions. However, this may detract from a realistic consumer environment and may compromise the validity of the results.

Assess if there are any legal liability issues involved in providing tools or equipment to the participant in the host country.

2. Serving of Samples for Central Location Tests

Develop a protocol in keeping with local customs, and provide ample time for training of agency personnel to ensure consistency in sample presentation and removal.

- (a) Items for consideration may include, but are not limited to, customs regarding: side from which one serves and removes samples, the hand with which one serves, etc.
- (b) Also research the customs for serving regarding hierarchies (age, gender, etc.) in the host country. Refer to appendices for more detailed information.
- (c) Use appropriate serving containers in keeping with local customs and the type of product being served. For example, paper or plastic may be appropriate in some cultures but others may expect glass, ceramic, etc.

C. TEST VALIDATION

Test validation (defined as the process followed by a researcher to confirm that a respondent participated in the test) should take place on the actual population tested, following the test. The researcher or hired independent agency should complete a higher number of validations if he/she is unfamiliar with the agency or host culture. However, care must be taken that the process does not offend the respondent based on the local cultural attitudes. In some countries validation may not be possible, because respondents cannot be reached. Validation may include home visits, telephone calls, etc., as appropriate to the culture to verify participants' qualifications and participation. In some cases where telephone or postal service infrastructures do not exist, validation protocols should be developed prior to the start of the study. Validations help ensure that the agency and respondents followed appropriate protocols. Test validation may be the key to understanding unexpected data results. By the time data become available and reviewed, it may be too late to go back and validate the results.

During the validation process, key screening questions, such as demographics, product or brand usage, etc., should be asked. Respondents' identification numbers should be verified to ensure data entry errors did not occur. Information pertaining to the test such as product use, sampling, or preparation will also help uncover activities other than those prescribed through the agency, written or verbal instructions, problems, etc.

VII. MULTI-COUNTRY/CULTURE APPROACH

This section discusses the business and technical perspectives of consumer product tests across cultures and countries conducted in multiple countries or with multiple cultures. While many of the principles discussed in previous sections apply to these studies, there are unique technical and business issues to consider in including several countries or cultures in the research or test.

A. BUSINESS PERSPECTIVE

Today's market economy is global. Companies now look beyond their immediate borders for new market opportunities in countries where they have not previously done business.

Due to enhanced global communication through technology and travel, consumers worldwide are becoming more similar in their preferences and demands for consumer goods. Existing products may lend themselves to harmonization internationally, thus allowing the creation of a limited number of formulas globally.

There are two basic strategic business approaches to consider when introducing products globally: Lead Country versus Multiple Countries. In a Lead Country approach, a product is developed and introduced into a country with the most market potential. The product is modified in that market and then globally rolled out. In this scenario, the country with the most apparent immediate need for the product would be the Lead Country. In a Multiple Countries approach, a product is developed and introduced in several countries. In this scenario, either the countries with similar cultures or in key geographic locations would be selected. In either strategy, a target consumer population must be defined and appropriate action standards set. This may include niche markets in some countries versus mass appeal in another country. For example, a product such as a frozen waffle may have mass appeal in the U.S., but may only appeal to a niche market in a country such as Thailand. The producer benefits in both cases because the frozen waffle meets a consumer-defined need regardless of the size of the market. In the case of the niche market for Thailand, the strategy and extent of the consumer need must be examined to ensure that it leads to a viable business proposition. Additionally, the relative perceived benefits that a product possesses may differ from country to country. As an example, products with soy are more widely received and demanded in Japan, as the Japanese have understood the benefits of eating soy over a long period of time. On the other hand, in the U.S., soy products still reach limited success. Soy still has an unappealing sensory halo that overshadows the perceived health benefits in the mind of many U.S. consumers.

Setting action standards may differ from country to country. Some countries may be willing to launch and operate at a loss to build market share. Given this, there must be a comparable way to measure potential performance of a product across all markets and countries. Hedonics, purchase intent, volumetrics, competitive benchmarking, or benchmarking against the company's own established product already in-market are factors to be considered. The overall market potential must take into account the potential cannibalization and loss of share for existing products in an established market versus the opportunity to develop a new category in a growing market.

Other considerations include product individualization for different cultures. A product formula may require adjustment to meet local consumer preferences. Examples of these cultural preferences might include the preference for lower sweetness by the Japanese, German preferences for lower acid and less sweet carbonated beverages, and Latin American preferences for higher fragrance levels in body lotions, as cited by industry practitioners in various CPG (consumer packaged goods) companies. Cultural/religious factors may also require changes in formula (for example, Halal formulas without certain animal by-products). These required formula adjustments must be considered by the producer when assessing the business potential of a product in a new country. In some cases, the required formula changes may lead to production and supply chain challenges that offset earnings potential. For example, will the adjusted formula cost more to produce? Will it have to be made during separate production runs? Will it require importation or sourcing of local ingredients, or both?

Regulatory and legal issues affecting product ingredients vary from country to country (what is permitted, active levels, antioxidants, dyes, etc.), size/package regulations, product claims (nutritional or otherwise) and commodity protection (e.g., required to source and use local ingredients). These issues might require modifications to the formula tested in a given country during a multi-country consumer test. It might require that a product be made by a local producer using local ingredients. Finally, it may change the concept, or way that a product can potentially be marketed.

Cross-cultural consumer research addresses all the scenarios and business issues discussed above. See Sections III and IV in this manual to gather more information about factors that need to be assessed regarding testing and marketing a product in other countries or with other cultures.

B. PROJECT MANAGEMENT/LOGISTICS

1. Testing Agency/Supplier

When conducting a consumer test across multiple countries, the choice of a supplier will be crucial. Whether a local or a global supplier is chosen, there will be trade-offs. A local supplier probably knows

the nuances and special elements of conducting research in their own country. If local suppliers are used to field each local study, someone must be appointed to handle the master coordination among countries. This responsibility usually falls on the researcher, and will require time and great attention to detail. For example, when local suppliers are being used, it is imperative that a master research plan and protocol be developed to share with all local suppliers. Local suppliers, in turn, should input their knowledge of testing nuances and special requirements to the researcher, who adapts the master research plan to incorporate local issues. This will ensure that the master protocol is adapted appropriately to an individual country or culture without influencing the value of the data to be collected. The coordination of all local cross-cultural consumer studies involves a lot of effort and the researcher needs to decide if he/she has the time to invest in the organization of all the study components.

Activities that have to be adapted and coordinated in each country will include: ballot development for each country (including translation and back translation); product acquisition and handling; customs and shipping; choice of appropriate test methodology (e.g., Is a home use test standard in all countries?); product size and quantity; definition of the target test population; packaging of the product; format of the data file from the local supplier; and consideration of any legal and regulatory issues. This list is not all-inclusive and is intended to give the reader a sense of the magnitude of details that must be considered when the researcher has to coordinate a multi-country test with many local suppliers. Section IV of this manual outlines more specific information to consider when working with local suppliers.

A global supplier may gain economies of scale, such as logistical efficiencies for the organization of ballot development, product placement, data analysis, etc. A global supplier is more likely to have an extensive database of consumer information than a local supplier. Also, a global supplier may subcontract work within a country to the local supplier. In this case, the global supplier handles the master coordination of the details highlighted in the previous paragraph. The researcher contracting the work should still prepare a master research plan and protocol, and make certain that the global supplier addresses all local nuances to ensure the validity of the information collected. However, there are a limited number of global suppliers. Refer to Table 2 for a list of international and country specific organizations that can help you identify appropriate global or local suppliers.

2. Sequential Versus Simultaneous Approach

Obtaining results within a tight project timeline can be a challenge when conducting a multi-country test. The project timeline should be consulted at the onset of the research, and the research plan within and between countries should be addressed taking the schedule into account. For example, is there a greater need to acquire data from a lead country first, and then adapt the product and research protocol following analysis of the results from that lead country? Or, is it imperative that the data be received from all countries of interest simultaneously? The above factors could lead to the design of the research in either a sequential (lead country first) or simultaneous (all countries fielded together) research plan.

The sequential research plan is often easier to coordinate and conduct, as it allows the researcher time to learn and adapt the methodology while the product is in field in the lead country. The simultaneous research plan requires that all test details be coordinated simultaneously for all countries and that results be returned within the same time frame. Thus, this approach requires more resources and careful consideration of all factors across countries that will influence timing of fielding the research. These factors include such items as: time needed to get samples through customs (importing product) in all countries; differences between countries ability to field or place samples; differences in time to collect and analyze the data; cultural or religious holidays; environmental/weather conditions; differences in test methodology (CLT [Central Location Test] or HUT [Home Use Test]); and differences in time required by the fielding agency to prepare the data file. This list is not meant to be all-inclusive.

Sections III and VI in this manual should be cross-referenced to identify other factors influencing timing of the research plan. Due to these factors, a multi-country study may take longer to field and obtain results than anticipated.

3. Action Standards and Databases

Another aspect that should be considered when fielding a multi-country research study is that developed markets may differ in the amount of information needed for the decision-making process than emerging markets. For example, some countries may have no norms or database information available for new products. It is imperative that the appropriate action standard be clearly defined before the research is conducted. Additional research may have to be conducted for that country, or more planning may have to be completed for one or more of the countries included in the study to gather the required information on action standards. For example, the action standard may be

benchmarking against an established product already in that market, or inclusion of a normative product in the test design. If a totally new food form, such as a filled cookie, is being introduced for kids in Mexico, it should be determined if there is an appropriate benchmark, such as locally made filled cake that can be included in the study.

C. ADAPTATION/LOCALIZATION OF DESIGN

When conducting tests in more than one country, research designs should be reviewed to make sure that they meet the study objectives and that they have been properly adapted for each country by addressing cultural differences. These cultural differences may include special attention to religious values, social status, typical education level and reading comprehension, role of gender and age in the society, and appropriate social etiquette. For example, in many Middle-Eastern cultures, it is not socially acceptable to talk directly to the female head of the household, even though she may be the primary purchaser of products. In this case, the male head of the household must be interviewed to obtain consumer input. More details can be found in Sections III, IV, and VI of this manual addressing the cultural items to consider when designing a study and in the appendices for specific cultures and countries.

1. Questionnaires

Section V has addressed some of the caveats and important issues to consider in designing questionnaires for consumer product tests across cultures and countries.

Cultural differences in responding to scales must be considered when designing cross-cultural studies that may require modification or adaptation of the scale. Data interpretation can be skewed by the tendency to overuse or avoid specific parts of scales. In many countries in Latin America, it is considered impolite to use negative parts of a hedonic scale. Differences in language may impact the type of scale used. Yeh et al. (1998) found that the 9-point hedonic scale was used differently by American, Korean, Chinese, and Thai consumers. Yao et al. (2003) also described differences in scale usage among American, Japanese, and Korean consumers. These researchers hypothesized that effects of inhibition of use of categories based on verbal labels, effects of translation from English, psychophysical style, and order effects may have caused the differences.

Some languages may not work well to easily describe and accurately anchor all points along the scale. The questionnaire may need to be significantly adapted from country to country to address differences in scale usage and language nuances. According to Yao et al. (2003), in translation, the Korean word for “extremely” (“kuktor-ro”) is reported as being more extreme than its meaning in English. For this reason, consumers may have been more reluctant to use that scale category. The intricacies and detail of the Chinese language may provide more attributes to describe product and package attributes compared to the English language (Murray 2001). When the questionnaire is adapted to a given country, careful consideration must be made by the researcher to ensure that the desired data and information is still being collected within and between countries.

Section V of this manual details items to consider when designing a questionnaire for a different culture/country.

Despite the adaptation of the test design and questionnaire to the different host countries, the research objective should still be met. It is important that the appropriate action standard will still be measured. Will the desired discrimination among all samples be obtained? Can the appropriate between-country comparison of results be made?

2. Product Issues

It is also important to consider the differences in standard usage or consumption of the test product in the countries being considered for testing. Products may be consumed or used in a very different fashion in one given country versus another. Two such specific examples are:

- (a) How is laundry detergent used? It may be necessary to adjust the formulation of laundry detergent depending on whether it will be used in a washing machine, or if the consumer does the laundry by hand in the host country. In emerging markets, such as India, washing machines are still a luxury item, and thus, laundry is typically done by hand.
- (b) Are there cultural influences? Many Asian cultures have a high incidence of lactose intolerance. Therefore, milk is not commonly consumed. In those cases, cereal products are often eaten without milk as a snack product, and thus, in the test instructions, consumers should be directed to consume the product under normal eating circumstances (e.g., without milk).

If there are differences among the countries in how the product is normally used, the relative merits of standardization versus confounding the research with differences in normal usage should be considered. It is usually best to adapt the test protocol to local customary usage. This ensures that consumers will be assessing the product in a normal usage occasion, and will also allow the researcher to determine if further formula modifications must be made to a product to meet local needs.

D. DATA HANDLING AND INTERPRETATION OF RESULTS

General ideas regarding analyses of data from a multi-country approach are provided. For specific information and recommendations on data issues and different data analyses to be conducted with cross-cultural consumer datasets, refer to Sections VIII and IX.

In general, before comparisons across countries can be made, it is important that data analysis first be carried out separately for each individual country.

There are several factors that may affect the applicability of a cross-country analysis. Caution should be taken in how the combined data are treated statistically, due to possible differences in the way the products were prepared, presented, and evaluated, in the questions that were asked, ballot designs, the number of attributes considered, or the number of panelists included. Because it is likely that there will be cultural differences, it is important to examine how these factors affect the data collection, analysis, and interpretation. Some cultures are more likely to give higher liking scores than others (Yao et al. 2003). In the experience of some CPG researchers, consumers in Spain tend to use the higher end of the liking scales compared to consumers in the United Kingdom, and consumers in India provide higher liking scores on average than consumers in Korea. Marchisano et al. (2003) found differences in consumers' tendency to express a preference when comparing putatively identical stimuli when comparing consumer responses from the U.S. and Korea. Therefore, when conducting studies in a foreign country, it is helpful to work with a supplier or with existing data in the company's database to compare the results with known norms. If one or more products from the database were included in the study, it is possible to verify the validity of the liking scores. Another recommended practice is to include a product in the research to serve as the benchmark rather than relying on existing databases.

When multi-country data are collected and the data will be merged, several steps should be observed.

1. Verify that the products were prepared and presented in the same way. Differences in usage or preparation can affect the sensory characteristics of the product, and thus, lead to differences in consumer perception and evaluation of the samples in the study.
2. Verify that the same ballot was used for each study, or at least its language equivalent. Also ensure that the same scales were used in each of the countries. If there are differences in the ballots or the scales, analysis should be done by country only, and preferences addressed by country.
3. Assuming that the ballots and scales used are equivalent for each country, verify that the scale usage for each country is similar. That is, verify that each country is using the entire range of the scale, and not favoring any particular section. If the countries use the scales in different fashions, data may need to be transformed to a common scale usage by country before proceeding further. This should only be done in consultation with a statistician who can verify the validity of any mathematical treatment of the data.
4. Once it has been verified that the scales are being used in the same way, or data have been transformed to correct for scale usage, ANOVA may be carried out on the data.
5. From the ANOVA, the product by country interaction term should be inspected to verify that there are no differences between countries in their scoring of the products. If the objective is to merge the data, the researcher should make sure that the consumers from the different countries are behaving in a similar manner in their liking of the products. In this case the product by country interaction should not be significant. If there is a significant product by country interaction, the data cannot be merged and the analysis should be done by country only, and preferences addressed by country.
6. If there is no product by country interaction, the researcher may attempt to merge the data, should there be any need or interest in order to analyze the merged data for overall product or attribute differences across countries.

Upon verification of all assumptions given above, results can be combined on a macro level and trends across countries can be investigated. The user will need to use good judgment in doing so, and may wish to look into using multivariate methods for this task. If the countries do behave differently, then each country should be analyzed separately and the overall results of each country evaluated. In the

case that each country is analyzed separately, it is key that the research objectives and action standards are clearly defined for that specific country at the onset of the research. This will ensure that the data can be assessed to determine if it is appropriate to pursue a product in a given country.

More specific information on the process to follow in combining data for cross-country analysis is presented in the case studies (Section IX).

VIII. DATA ISSUES

The purpose of this section is to discuss the issues involved in the collection and summary of data collected in consumer product tests across cultures and countries prior to the data analysis and interpretation. The reader should be aware that data analysis recommendations and examples are covered in the case studies (Section IX) and not in this section.

All the suppliers participating in a cross-cultural consumer research study should be given the same instructions. Ideally, all datasets and materials should be returned in the same format and with the same characteristics to the main researcher/client. Data should be given to the main researcher in its raw state, and wherever possible the original ballots or questionnaires should be included. When data are supplied in an analyzed form, sufficient detail must be provided to support the validity and credibility of the results. It is recommended that, in advance, the analysis methods be discussed by the main researcher and supplier to assure complete satisfaction for the client.

A. RAW DATA

1. Ownership of the Data

It should be clear that the raw data are owned by the client and that the entire dataset will be provided to him/her.

2. Environmental Details

Any test details that should be considered in the interpretation of the data must be provided, such as temperature, relative humidity, time of day, description of the physical facility, and social disruptions such as strikes or political events.

3. Demographics (Usage and Relevant Product Use)

Either demographic details of each respondent or a complete analysis of relevant demographic information must be provided. Psychographic or attitudinal factors must be included, where relevant.

4. Ballots

It is desirable, whenever possible, to receive all of the original completed ballots. Note that some countries, i.e., New Zealand, have strict privacy laws. Ballots are made anonymous before transferring to the client. The ballot originals must remain with the market researcher as part of the code of ethics.

5. Responses (Test Data)

The actual responses must be reported as gathered. If any data transformation was completed, the details of this transformation, including the actual transformation algorithm, must be reported. Missing data must be highlighted and the method used to input the data must be documented. Verification of data is essential.

6. Format

Any documentation or computer file must be accompanied by an explanation of the arrangement of information. For example, rows and columns must be identified.

7. Scale/Direction/Precision/Decimal Format/Units

Details of the nature of the data in each question on the questionnaire and any moderator's instructions must accompany the data. This information is particularly important in cross-cultural consumer studies. The more countries/languages involved in the study, the more critical it is to provide detailed information on the scales used and the data obtained. Cultural influences on scale use and observations from the vendor or researcher familiar with the culture must be reported (e.g., avoidance of end anchors, confusion with type of scale used, misinterpretation of an attribute or anchor, etc).

8. Media/Software/Protocol

If the data are collected using a computerized system, or are provided in electronic media, the specifications of the hardware, software, and operating systems are required, for example, ASCII or other data type. Specialized software for survey design, questionnaire deployment, and routing logic of the items on the questionnaire can be tremendously helpful (Marinelli and Schleck 1997).

9. Comments/Language/Interpretation Translation

Any open-ended questions must be provided in their original form with a translation. The qualifications of the translator must be provided, including previous experience in consumer/sensory testing.

10. Documentation on Test Procedure

A detailed report of the test process should cover all the steps in the test and data collection of data. Any departure from the original protocol, any alterations, sample, or respondent issues must be reported.

B. DATA ANALYSIS AND INTERPRETATION

1. Formatting of Raw Data for Analysis

Prior to analyzing the data, datasets from different countries or cultures must be combined into a single dataset or placed in a series of structured data files. Additional information may be added to the datasets, such as location and time of the test.

2. Matching of Terminology and Attributes

Data must be organized on the basis of matched terms and attributes. Procedures used to harmonize attribute names or question intent should be documented.

3. Methods of Analysis

The statistical procedures must be provided in sufficient detail to permit independent analysis. Any computer program used to provide results must be completely identified.

4. Data Analyst's Qualification and Experience

Credibility of the analyzed data is a function of the qualification of the analyst. Name, address, and method of contact should be included to permit discussion over completed data analyses.

5. Data Presentation (Tables and Charts)

Summarized data, in any form, should be clearly labeled and appropriate comments included to link the summary to the raw data.

6. Local Interpretation

An experienced local researcher can provide invaluable insight. Their interpretation, observations, or comments, or a combination thereof, could make the analysis of the data more effective.

7. Validation

Whenever possible, the data on samples should be compared with known samples in the same context. The results provide an indication of scale and attribute usage, which may be useful in interpretation.

8. Data Relationships

Relating consumer test information across countries requires careful consideration of the nature of the testing performed in each country. Consolidation of data into one large dataset must be done with care. It is advised that individual analysis, on a country-by-country basis, is conducted first. Those analyses may be compared by inspection prior to the application of any of the powerful multivariate techniques.

Multivariate methods, such as Principal Component Analysis (PCA) or Generalized Procrustes Analysis (GPA), may help in the interpretation of attributes and terminology across different cultures. This can simplify understanding of results and provide a powerful tool for organizing and presenting the data. Murray (2001) applied preference mapping and free-choice profiling to compare snack food preferences between Chinese and Australian consumers.

In cases where descriptive analysis has been performed, descriptive attributes may be related to consumer data to interpret these responses, particularly consumer diagnostic/attribute information. Sensory and analytical data can be successfully used to interpret cross-cultural consumer data (Lee and Heymann 2000).

IX. CASE STUDIES

Consumer product tests across cultures and countries are often conducted by consumer product companies that wish to introduce or improve products in different countries or for different cultures. These studies are complex because they may involve the use of differing hedonic scales, the need to relate or account for language or descriptor (consumer) differences for each country, and the need to interpret potential cross-cultural differences in liking and product attitudes. A detailed, and sometimes complex, statistical analysis is recommended to be able to understand consumer responses across products and cultures. The complexity of the cross-cultural data analysis increases when trained/descriptive panel data are used to further decipher and define the consumers' responses. This section's purpose is to show different approaches to analyze and understand data from consumer product tests across cultures and countries.

It is recognized that different types of cross-cultural consumer studies are conducted. Some are small-scale cross-cultural consumer studies, where small and simple datasets are collected. Other studies involve more complex datasets, which include many countries, many products, and other types of data (e.g., descriptive, market data, etc.).

To maximize the value of this case study, three types of datasets were analyzed and are presented.

A. CASE STUDY I

1. Characteristics

- One country/culture
- Few products

Some consumer product tests across cultures and countries are conducted in only one foreign country or with only one different culture. Companies conducting these studies may want to introduce a new product and need to understand the acceptability of this new product vis-à-vis existing products in that country or culture. Some companies may test several prototypes to determine the product with the highest liking for that country/culture. Usually there are only a few products (two to six) tested in these research projects.

2. Objective

A beverage manufacturer wishes to introduce a fruit-flavored beverage in a foreign country. A cross-cultural consumer research study was conducted to determine the acceptance of four products in the foreign country. These products differed in appearance and flavor.

The objective was to identify the product that was liked the best in the foreign country.

3. Methodology

Consumer study:

Ten (10) attributes were evaluated: Overall Liking (hedonic scale) and nine intensity measures of the following attributes:

Overall Color, Overall Aroma, Overall Clarity, Pineapple Flavor, Sour/Tart Taste, Sweet Taste, Natural Flavor, Thickness, and Aftertaste.

The respondent sample size was 117 participants; 9-point hedonic/intensity scales were used.

4. Within Country/Individual Country Data Analysis and Conclusions

The datasets for this case study are handled statistically in the same way as any other consumer test dataset. The challenges of these studies are mainly in the test execution and the reader is referred to the discussions of test design and execution in Sections IV and VI.

A list of the possible analyses to be conducted with these datasets and the benefits/output are described below:

TABLE 3—Case Study I country liking mean scores.

Product	Mean ov. Liking
P1	3.37 c
P2	2.49 d
P3	5.22 b
P4	6.25 a

Note: Means that share subscripts are not significantly different at $p \leq 0.05$.

- Analysis of variance
 - Principal component analysis (PCA) (recommended only with a large number of samples). See Risvik (1992) for an example of PCA applied to a cross-cultural comparison.
 - Segmentation
- (a) Analysis of Variance (ANOVA):
- The ANOVA (O'Mahony 1986) indicates the significant differences among products for each attribute. If differences in overall acceptability exist, this analysis points out which product(s) is (are) liked best in the foreign country/culture.
- Table 3 lists the mean liking scores for the four products tested in the foreign country. Similar tables are obtained for all other consumer attributes. These results indicate that product P4 was the product liked best. This would represent the best option for product introduction in this foreign country.
- (b) Principal Component Analysis (PCA)
- This method identifies patterns of correlations among attributes and substitutes a factor for them. The analysis then seeks to identify a second and a third factor to account for as much of the variance in the data as possible. PCA can be applied to any dataset where there are attribute ratings (Lawless and Heymann 1998). See Case Study III for an example. See also Dijksterhuis (1998), Jaeger et al. (1998), Grunert (1997), Scriven and Mak (1991) for examples of PCA methods applied to cross-cultural data.
- (c) Segmentation Analysis
- Segmentation analysis identifies subgroups of individuals who share a similar characteristic or characteristics such as perceptions, needs, or responses to products (Lawless and Heymann 1998). See Case Study II for an example.
- (d) Other Analyses
- Another analysis that some researchers may be interested in conducting with this type of dataset is a segmentation/cluster analysis. This analysis allows the study of consumer subgroups, according to their product liking patterns. The analysis of product preferences can then be conducted separately for each cluster, if desired.

B. CASE STUDY II

1. Characteristics

- Several countries/cultures
- Several test products

These are fairly typical cross-cultural consumer studies, conducted in different foreign countries or with several cultures. The objectives of these research projects may be to:

- Investigate the acceptability of different products in several countries or for several cultures.
- Determine the best liked product for each country/culture.
- Understand cross-cultural differences in liking and product perceptions.

2. Objective

A beverage manufacturer wishes to introduce a fruit-flavored beverage in five (5) countries. A cross-cultural consumer research study was conducted to:

- Determine the within and across country overall acceptance of the products under test.
- Investigate the presence of within and across country consumer segments with similar liking patterns.

TABLE 4—Case Study II country liking mean scores.

Product	Country 1	Country 2	Country 3	Country 4	Country 5
1	4.35 b	5.10 a	4.81 ab	5.02 a	3.43 c
2	4.55 b	3.93 c	4.39 b	5.07 a	5.15 a
3	6.13 b	6.10 b	6.29 ab	6.72 a	4.72 c
4	3.71 b	4.24 a	3.71 b	4.03 ab	2.49 c
5	6.27 b	6.90 a	6.04 b	6.82 a	5.31 c
6	4.72 cd	4.40 d	4.95 c	6.02 b	6.78 a
7	4.46 c	4.43 c	4.52 c	5.27 b	6.34 a
8	5.10 c	6.74 a	5.73 b	5.75 b	4.22 d
Sample Size	100	117	123	201	100

Note: Row means that share subscripts are not significantly different at $p \leq 0.05$.

Findings in the study will give direction to decisions regarding the introduction of one or more products in all countries.

3. Methodology

(a) Products:

Eight fruit-flavored beverages of interest were consumer tested in five (5) countries.

(b) Consumer study:

Ten (10) attributes were evaluated in all countries: Overall Liking (hedonic scale) and nine intensity measures of the following attributes:

Overall Color, Overall Aroma, Overall Clarity, Pineapple Flavor, Sour/Tart Taste, Sweet Taste, Natural Flavor, Thickness, and Aftertaste.

A 9-point hedonic scale was used for overall liking. A 9-point weak to strong scale was used for the attribute intensities.

Respondent sample ranged from 100–201 participants per country. The study was designed so that all respondents received all products.

4. Data Analysis and Conclusions

Several statistical analysis procedures can be used to fully understand and interpret the results of this cross-cultural consumer study, such as:

- Analysis of variance—used to determine mean liking differences for specific products between countries.
- Correlation coefficients—used to understand level of agreement in liking between countries and liking segments.
- Cluster analysis—used to group respondents with similar liking patterns across the product set to develop liking segments.

(a) Identifying Cross Country Differences:

Table 4 lists the mean liking scores for each product by country. Analysis of variance was used to determine significant mean liking differences for each product between the countries. Row means that share subscripts are not significantly different at $p < 0.05$.

Analysis of variance can also be used to determine liking differences for the products within each country as illustrated in Case Study I.

In general:

- The best liked products per country are:
Countries 1, 3, and 4: Products 3 and 5
Country 2: Products 5 and 8
Country 5: Products 6 and 7
This gives an indication of the best products to be introduced in each country.
- Overall, Product 4 was disliked by all countries.

Perhaps the most complete and compelling summary of country differences is the overlay plot of the product mean liking scores by country shown in Fig. 1. These analyses indicate that while Countries 1–4 show similar patterns of liking across products, Country 5 is the most unique compared to the other countries in this test. This is indicated by the generally lower mean scores of most products,

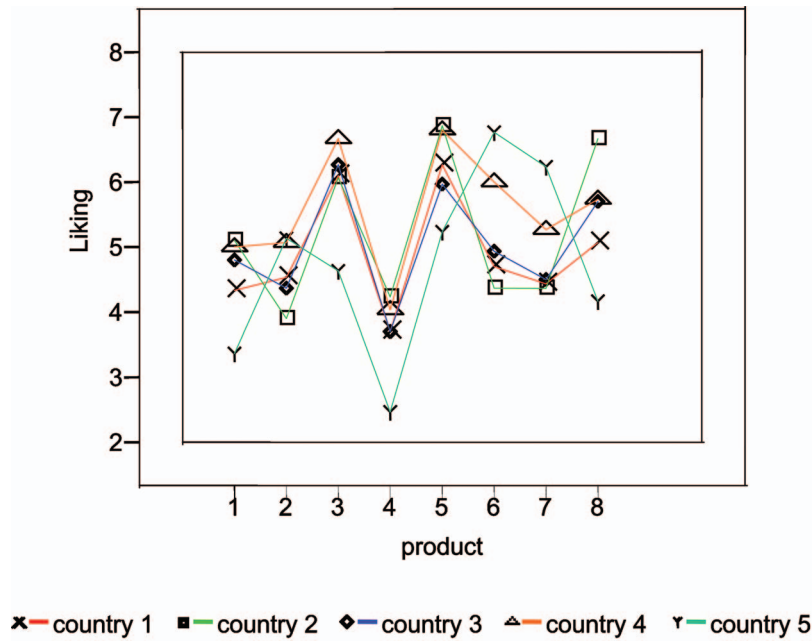


FIG. 1—Case Study I liking mean scores by country.

and the opposing liking pattern for those products either most or least liked. This is not likely due to scale usage since the liking means for products 6 and 7 are as high as the best liked products in other countries.

Correlation coefficients and pair-wise plots of the country liking mean scores can also give insight into differences between specific country pairs. The correlation table is shown in Table 5. While Countries 1 through 4 are highly correlated on overall liking, Country 5's correlations with the other countries are all much lower. These results are consistent with results shown in Fig. 1.

Similar analyses can be performed on any of the attribute liking and intensity scores to give additional insight into differences among countries.

(b) Identifying and Interpreting Consumer Segments:

While the above between-country differences do demonstrate some differences, segmentation of the individual consumers across all countries gives insight into both the within and cross-country differences. There are a number of methods commonly employed for segmenting consumers based on the matrix of individual product scores across the product set, including cluster analysis (Qannari et al. 1997), internal preference mapping (Schlich and MacEwen 1992), latent segmentation analysis (Vigneau et al. 2001), and probabilistic similarity models (Ennis and Rosseau 2004).

For this case study, cluster analysis is used to group respondents with similar patterns of liking across the eight products to develop liking segments. The data used for this analysis are a matrix with each row containing the liking scores for the eight products for a respondent. Owing to the potential for varying scale usage across countries or cultures, eliminating this effect may prove useful. To remove the effect of scale usage for each *individual (respondent)*, it may be more useful to perform the cluster analysis on each respondent's relative liking differences across the product set. This can be achieved by standardizing the liking scores for each respondent (for each individual, for each liking score, subtract the individual's mean liking score across the products, then divide by the individual's standard deviation across the

TABLE 5—Case Study II correlations between country product liking mean scores.

	Country 1	Country 2	Country 3	Country 4	Country 5
Country 1	1.00				
Country 2	0.80	1.00			
Country 3	0.94	0.87	1.00		
Country 4	0.95	0.70	0.92	1.00	
Country 5	0.31	-0.11	0.23	0.53	1.00

TABLE 6—Case Study II liking mean scores by liking segment.

Product	Segment 1	Segment 2	Segment 3
1	5.25 a	3.93 c	4.48 b
2	3.91 b	6.39 a	3.81 b
3	5.73 b	5.72 b	6.91 a
4	4.32 a	3.20 b	3.49 b
5	6.73 a	6.09 b	6.10 b
6	3.90 c	7.30 a	5.46 b
7	3.65 c	7.13 a	4.48 b
8	6.88 a	4.74 b	4.75 b
Sample Size	240	197	186

Note: Row means that share subscripts are not significantly different at $p \leq 0.05$.

products).

As a result of this type of statistical treatment, three consumer segments were identified in the analysis. The product mean liking scores of the three segments are given in Table 6. Analysis of variance was used to determine significant mean liking differences for each product between the segments. Row means that share subscripts are not significantly different at $p < 0.05$. The overlay plot of the product mean liking scores by segment is shown in Fig. 2. Analysis of variance can also be used to determine liking differences for the products within each segment as illustrated in Case Study I.

In general:

- Segments have different patterns of liking across products, highlighting the uniqueness of each segment.
- The products liked best by each segment were:
Segment 1: Products 5 and 8
Segment 2: Products 6 and 7
Segment 3: Products 3 and 5

The cross-tabulation of country in Table 7 illustrates segment membership by country.

- Segment 2 mainly represents Country 5 (which explains why products liked best by this segment are those best liked by Country 5).
- Segment 1 is strongly represented by Countries 2 and 3.
- Segment 3 represents Countries 1, 2, 3, and 4.

Demographic criteria and perhaps responses to the specific product attributes are required to further study these segments, particularly Segment 3.

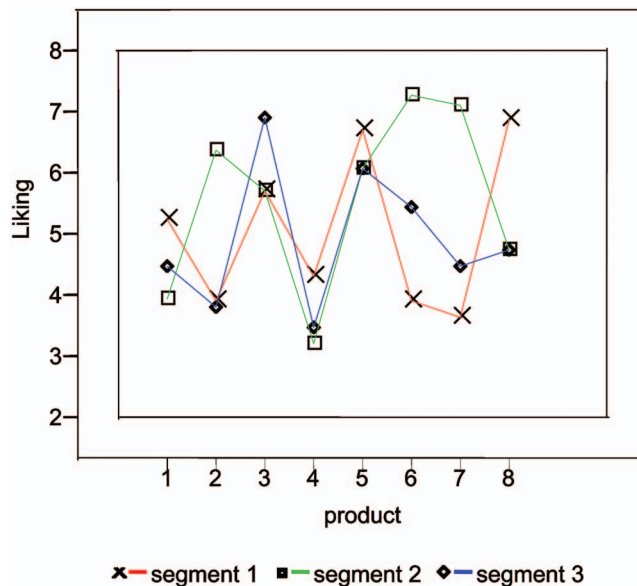


FIG. 2—Plot of Case Study II liking mean scores by liking segment.

TABLE 7—Case Study II liking segment membership percentages by country.

	Segment 1	Segment 2	Segment 3
Country 1	34.0	30.0	36.0
Country 2	65.8	9.4	24.8
Country 3	45.0	22.0	33.0
Country 4	34.0	31.5	34.5
Country 5	13.0	70.0	17.0

The analysis of these consumer segments is valuable and used by companies to decide if the product selection should be based on the liking scores of countries or segments; i.e., if the product introduction is to satisfy countries or consumer segments across countries.

The data analyses described above are also appropriate for studying other consumer liking measures and attribute ratings to give additional insight into cross-cultural differences.

C. CASE STUDY III

1. Characteristics

- Several countries/cultures
- Multiple test products
- Descriptive data collected on all products

The objectives of these research projects may be the same as listed under Case Study II. Additionally, the descriptive data can be used to aid in the interpretation and understanding of the consumer data. For example, it is possible to determine the drivers of liking based on descriptive data, as shown in this case study.

2. Objective

A beverage manufacturer wishes to introduce a fruit-flavored beverage in five (5) countries. A cross-cultural consumer research study was conducted to:

- Determine the within- and across-country overall acceptance of products under test.
- Investigate the presence of within- and across-country consumer segments with similar liking patterns.
- Determine the sensory drivers of liking across and within countries using descriptive analysis.

Findings in the study will give direction to decisions regarding the introduction of one or more products in all countries.

3. Methodology

(a) Products:

Twenty-seven fruit-flavored beverages representing an expansive multidimensional sensory space were consumer tested in five (5) countries and simultaneously sensory tested (in a single country).

(b) Consumer study:

Ten (10) attributes were evaluated in all countries: Overall Liking (hedonic scale) and nine intensity measures of the following attributes:

Overall Color, Overall Aroma, Overall Clarity, Pineapple Flavor, Sour/Tart Taste, Sweet Taste, Natural Flavor, Thickness, and Aftertaste.

A 9-point hedonic scale was used for overall liking. A 9-point weak to strong scale was used for the attribute intensities.

Respondent sample ranged from 100–201 participants per country. The study was designed so that all respondents received all products.

(c) Sensory/Descriptive:

Descriptive data were collected from a 15-member trained descriptive panel using a 15 point intensity scale to evaluate products. A ballot consisting of 31 attributes was utilized to evaluate the 27 products under test:

- Overall flavor intensity.
- Sweet, sour, salty, bitter tastes.
- Flavor for the following attributes: fresh sweet pineapple, pineapple juice, overripe pineapple,

TABLE 8—Case Study III country liking mean scores.

Product	Country 1	Country 2	Country 3	Country 4	Country 5
P1	4.35 b	5.22 a	4.81 ab	5.02 b	3.43 c
P2	3.71 b	4.33 a	3.72 b	4.04 ab	2.54 c
P3	6.43 ab	6.56 a	6.11 b	6.33 ab	5.22 c
P4	6.47 ab	6.81 a	6.23 b	6.42 ab	4.83 c
P5	5.80 a	5.56 a	5.46 a	5.61 a	4.28 b
P6	5.58 a	6.03 a	5.76 a	5.84 a	4.51 b
P7	5.89 b	6.56 a	5.82 b	6.52 a	5.18 c
P8	5.10 c	6.74 a	5.77 b	5.75 b	4.20 d
P9	5.92 b	6.35 a	6.42 a	6.28 ab	4.85 c
P10	5.29 b	6.09 a	5.91 a	5.62 ab	4.03 c
P11	5.77 b	6.58 a	6.17 b	6.11 b	4.83 c
P12	4.55 b	3.93 c	4.38 b	5.07 a	5.15 a
P13	5.93 a	6.09 a	5.90 a	6.30 a	4.28 b
P14	6.24 a	6.48 a	6.50 a	6.42 ab	5.10 b
P15	3.06 b	4.50 a	4.08 a	4.06 a	2.78 b
P16	5.65 a	5.76 a	5.81 a	5.61 a	4.44 b
P17	6.13 b	6.09 b	6.32 ab	6.70 a	4.67 c
P18	5.84 c	6.72 a	6.18 bc	6.27 ab	4.80 d
P19	5.61 cd	6.38 ab	5.97 bc	6.58 a	5.21 d
P20	4.56 c	5.08 ab	4.82 bc	5.28 a	3.85 d
P21	6.17 b	6.62 ab	6.29 b	6.77 a	4.82 c
P22	5.37 b	6.39 a	6.20 a	6.28 ab	4.35 c
P23	5.62 a	5.92 a	5.89 a	5.92 a	4.39 b
P24	6.27 b	6.88 a	6.01 b	6.82 a	5.24 c
P25	4.72 cd	4.41 d	4.95 c	6.02 b	6.82 a
P26	4.46 c	4.44 c	4.53 c	5.27 b	6.33 a
P27	6.62 a	6.61 a	6.69 a	6.35 a	4.98 b
Sample Size	100	117	107	199	100

Note: Row means that share subscripts are not significantly different at $p \leq 0.05$.

candied pineapple, oxidized pineapple, pineapple rind, mandarin orange, tangerine, grapefruit, lemon, lime, orange, peach, apricot, pear, berry, metallic, medicinal, and preservative.

- Aftertaste of the following attributes: sweet, sour, bitter, medicinal, and metallic.
- Astringency (feeling factor).
- Viscosity (texture term).

The descriptive data must be as descript as possible on the large product sample set to maximize its utility and the ability to correlate to consumer responses. This aspect will be discussed in the data analysis and results sections.

4. Data Analysis and Conclusions

(a) Identifying cross country differences:

The analyses presented in Case Study II are also conducted in this case: the analysis of variance (ANOVA), pair-wise plots, and correlation analyses of the consumer data.

Table 8 lists the mean liking scores for each product by country. Analysis of variance was used to determine significant mean liking differences for each product between the countries. Row means that share subscripts are not significantly different at $p < 0.05$.

Figure 3 shows the overlay plot of the product mean liking scores by country. Country differences can be easily identified in this plot. Review of these analyses indicates that:

- Country 5: Is a unique country showing a different pattern of liking for the samples tested. Generally speaking most of the fruit beverages were disliked by Country 5. Product P25 may be a promising product to consider for this country.
- Countries 1–4 showed a similar liking pattern across products.
- Best product candidates per country:
Country 4: P24, P23, P21, P19, and P17

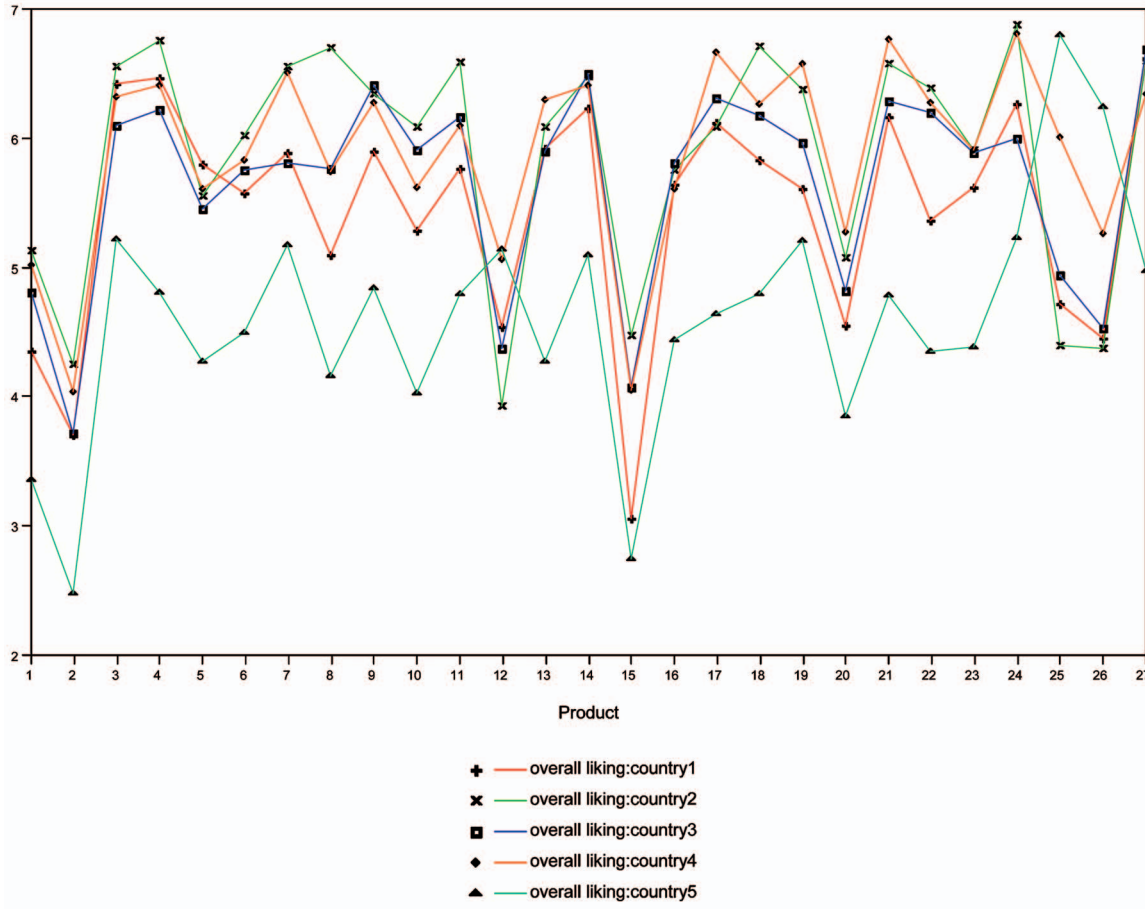


FIG. 3—Case Study III liking mean scores by country.

Country 3: P14 and P27

Country 2: P3, P4, P7, P8, P11, P18, P21, P24, and P27

Country 1: P27

- Except for Country 5, product P27 was generally liked across countries. The company may consider introducing this product in all countries, except in Country 5.
- (b) Determining sensory drivers of liking for the countries using descriptive data:

Additional data analyses were performed with the descriptive data to link it with the consumer data to understand sensory drivers of liking within and across countries.

(1) PCA

Rotated principal components analysis (PCA) was used to reduce the dimensionality of the 31 descriptive attributes. Six components adequately represent the descriptive data for the 27 products. These components explain 76 % of the variability in the descriptive data. The resultant rotated components, or factors, are then labeled to reflect their sensory attribute composition. The factors are as follows:

Factor 1 = sweet-medicinal⁺/pineapple juice⁻

Factor 2 = metallic-fruit

Factor 3 = sour-flavor impact⁺/candied pineapple⁻

Factor 4 = mixed fruits

Factor 5 = pineapple-bitter⁺/mandarin orange⁻

Factor 6 = overripe pineapple⁺/fresh pineapple⁻

Note: +/- signs indicate orthogonality (directionality) of factors and not their effect on the consumer hedonic ratings. Thus as the intensity of sweet-medicinal⁽⁺⁾ increases, the intensity of pineapple juice⁽⁻⁾ decreases.

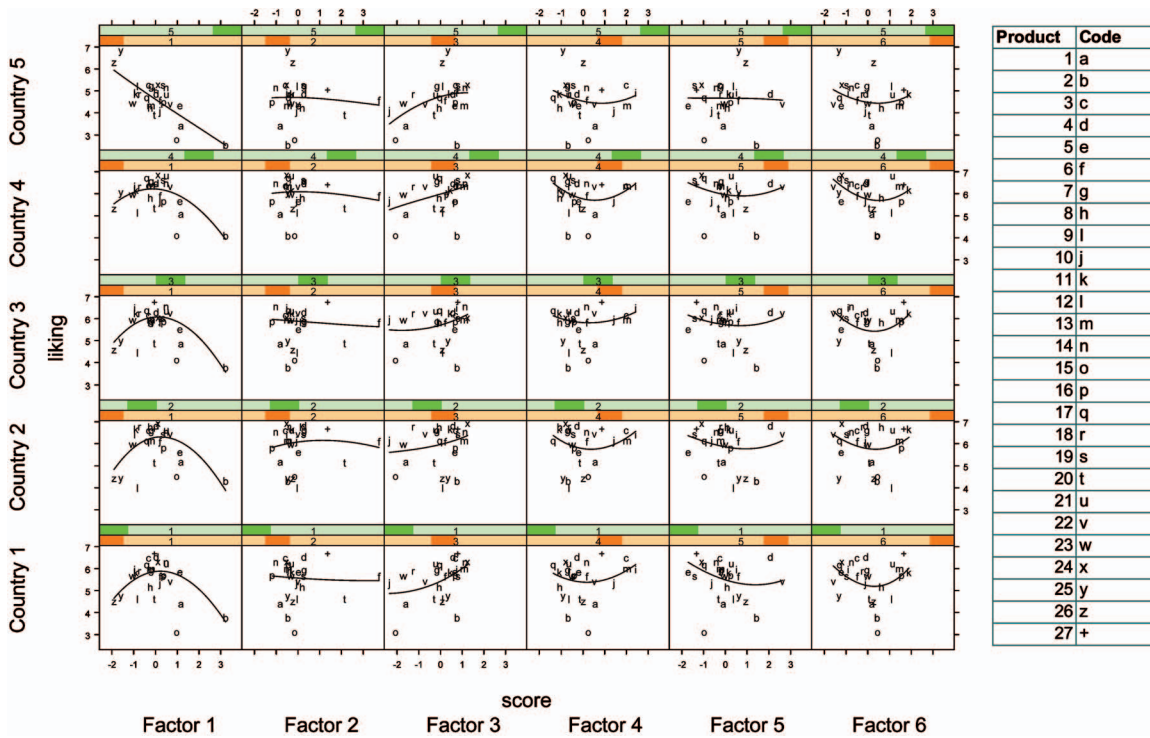


FIG. 4—Case Study III relationships between sensory factors and consumer liking by country.

(2) Data Relationships

Figure 4 shows multi-panel display scatter-plots of the sensory factor scores to consumer overall liking by country. The rows in the panel represent the countries; the columns in the panel represent the sensory factors. Fitted lines using the LOWESS (Locally Weighted Scatter-plot Smoothing) smoothing algorithm have been added. LOWESS is a fitting tool to help visualize the underlying pattern in scatter-plot data.

This display can be utilized to understand the sensory drivers of liking for each of the countries. The figure shows that Factor 1 had the most influence on consumer overall liking. Figure 4 shows that for Countries 1–4 there is a curvilinear effect, that is to say that products of “high pineapple juice flavor” are “moderately disliked” on overall liking as well as products that are “high sweet-medicinal flavor.” Products that have a moderate intensity for both “flavors” are more acceptable and rated 5–7 accordingly on overall liking. In contrast, Country 5 has a very different overall liking pattern. For this country, as products increase in “sweet medicinal” flavors (and thus decrease in “pineapple juice flavor” overall liking decreases as evidenced by the shift in overall liking from 6 to 2. It should also be noted that for Country 5, products 25 (y), 26 (z), and 2 (b) strongly define this relationship.

(c) Identifying and interpreting consumer segments:

(1) Cluster analysis to identify segments

As in Case Study II, cluster analysis was performed to identify consumer liking segments across countries. Three consumer segments were identified, using standardized scores for consumer measures to account for scale and scoring differences between consumers within and across countries. Mean liking scores for these segments are shown in Table 9. Analysis of variance was used to determine significant mean liking differences for each product between the segments. Row means that share subscripts are not significantly different at $p < 0.05$.

Products that distinguish consumer Segments 2 and 3 are Products 8, 25, and 26. A comparison across segments over the range of products affords the opportunity to substantiate and qualify the statistical segmentation. The cross-tabulation of country in Table 10 illustrates segment membership by country. From this table, it is noted that (a) Segment 1 has representation from each country, (b) Countries 1 and 4 are *most* represented by Segment 1, (c) more than 50 % of liking Segment 3 is comprised of Country 5, and (d) less than 10 % of Segment 3 is comprised of Country 2.

TABLE 9—Case Study III liking mean scores by liking segment.

Product	Segment 1	Segment 2	Segment 3
P1	4.38 b	5.35 a	4.36 b
P2	3.47 b	4.69 a	3.25 b
P3	6.60 a	6.13 b	5.60 c
P4	6.29 a	6.42 a	5.82 b
P5	5.91 a	5.09 b	4.80 b
P6	5.47 b	6.03 a	5.42 b
P7	6.15 ab	6.53 a	5.65 b
P8	5.58 b	6.44 a	4.71 c
P9	6.02 b	6.59 a	5.44 c
P10	5.32 b	6.04 a	5.01 b
P11	6.34 a	5.74 b	5.52 b
P12	4.14 b	4.26 b	6.08 a
P13	5.69 b	6.49 a	5.33 b
P14	6.54 a	6.18 a	5.62 b
P15	3.21 b	4.90 a	3.55 b
P16	5.77 a	5.31 b	5.25 b
P17	6.50 a	5.44 b	6.10 a
P18	5.85 b	6.76 a	5.59 b
P19	5.93 b	6.58 a	5.80 b
P20	4.70 a	4.85 a	5.00 a
P21	6.26 a	6.65 a	5.80 b
P22	5.71 b	6.24 a	5.67 b
P23	5.30 b	6.50 a	5.19 b
P24	6.37 ab	6.68 a	6.08 b
P25	5.23 b	3.93 c	7.52 a
P26	4.61 b	3.82 c	7.03 a
P27	6.54 a	6.39 a	5.74 b
Sample Size	269	168	164

Note: Row means that share subscripts are not significantly different at $p \leq 0.05$.

The same approach can be taken with any other type of individual consumer measure such as age, income level, or product usage to further understand the composition of the segments.

The analysis of these consumer segments is valuable and used by companies to decide if the product selection should be based on the liking scores of countries or segments; i.e., if the product introduction is to satisfy countries or consumer segments across countries.

(2) Drivers of liking per segment using descriptive data

Additional insights can be gained by linking the segmentation results with the sensory data to determine cross-country drivers of liking for each of the identified segments. Figure 5 contains the multi-panel display of the relationship of sensory factors to consumer liking by segment with the fitted LOWESS smoothed lines added.

From previous analyses, the factors had been identified as follows:

Factor 1 = sweet-medicinal⁺/pineapple juice⁻

Factor 2 = metallic-fruit

Factor 3 = sour-flavor impact⁺/candied pineapple⁻

Factor 4 = mixed fruits

Factor 5 = pineapple-bitter⁺/mandarin orange⁻

TABLE 10—Case Study III liking segment membership percentages by country.

	Segment 1	Segment 2	Segment 3
Country 1	56.0	27.0	17.0
Country 2	49.6	41.9	8.6
Country 3	43.7	33.3	23.0
Country 4	42.6	26.9	30.5
Country 5	33.0	10.0	57.0

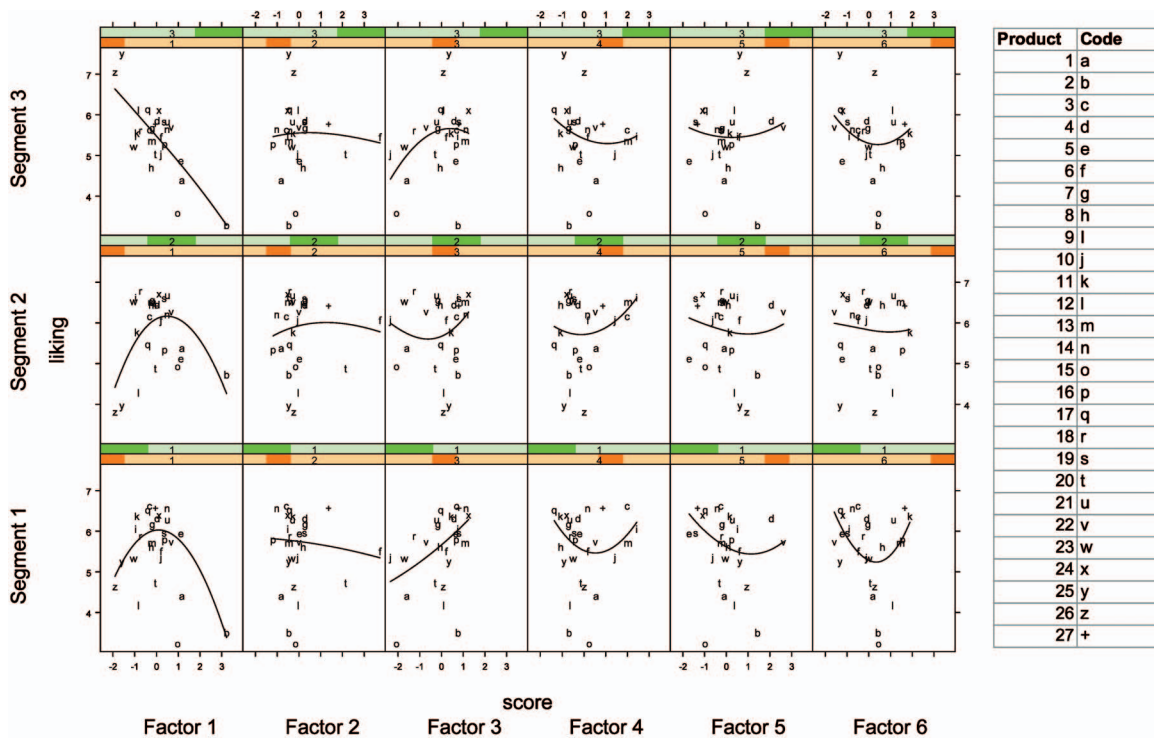


FIG. 5—Case Study III relationships between sensory factors and consumer liking by liking segment.

Factor 6 = overripe pineapple⁺/fresh pineapple⁻

Figure 5 indicates that for Consumer Segment 3, overall liking increases as “pineapple juice” flavor increases. This segment dislikes high levels of “sweet-medicinal” flavors. Conversely, both Consumer Segments 1 and 2 “dislike” high levels of either sides of Factor 1 (sweet-medicinal and pineapple juice), and enjoys a moderate (more balanced) composition of Factor 1.

Products that help define the sensory “characteristics” for this factor (Factor 1) include:

Product 26 (z) = High pineapple juice flavor

Product 2 (b) = High sweet-medicinal flavor

As shown by Fig. 5, Segment 1 appears to enjoy increasing levels of “sour-flavor” characters as indicated by its response to Factor 3, and is less accepting of moderate levels (balanced combination) of Factor 6 (overripe pineapple versus fresh pineapple), while the other segments are relatively unaffected by these factors.

In summary, as shown in Fig. 5, each segment could be characterized by the types of products they either like or dislike (vis-à-vis the intrinsic product characteristics as defined by the response to the sensory factors), as follows:

Segment 3 likes: High pineapple juice flavor.

Segment 2 dislikes: High medicinal flavors and high pineapple juice flavors.

Segment 1 likes: High sour flavor, moderate fruity flavors.

X. BIBLIOGRAPHY

Elliott, R. and Jankel-Elliott, N., 2003, “Using Ethnography in Strategic Consumer Research,” *Qualitative Market Research: An International Journal*, Vol. 6, No. 4, pp. 215–223.

Iacobucci, D., Grisaffe, D., Duhachek, A., and Mercati, A., 2003, “FAC-SEM: A Methodology for Modeling Factorial Structural Equations Models, Applied to Cross-cultural and Cross-industry Drivers of Customer Evaluations,” *Journal of Service Research*, Vol. 6, No. 1, pp. 3–23.

Pires, G., Stanton, J., and Cheek, B., 2003, “Identifying and Reaching an Ethnic Market: Methodological Issues,” *Qualitative Market Research: An International Journal*, Vol. 6, No. 4, pp. 224–235.

- Kim, S. S. and Prideaux, B., 2003, "A Cross-cultural Study of Airline Passengers," *Annals of Tourism Research*, Vol. 30, No. 2, pp. 489–492.
- Shoham, A. and Bencis, M. M., 2003, "Consumer Ethnocentrism, Attitudes, and Purchase Behavior: An Israeli Study," *Journal of International Consumer Marketing*, Vol. 15, No. 4, pp. 67–86.
- Wright, L. T., 2001, "Intercontinental Comparisons in Marketing Strategy," *International Marketing Review*, Vol. 18, No. 3, pp. 344–354.

XI. REFERENCES

- Asay, S. M. and Hennon, C. B. (1999). The challenge of conducting qualitative family research. *Family & Consumer Sciences Research Journal*, 27 (4), 409–427.
- Bertino, M., Beauchamp, G. K., and Jen, K. C. (1983). Rated taste perception in two cultural groups. *Chemical Senses*, 8 (1), 3–15.
- Brokaw, S. C. and Lakshman, C. (1995). Cross-cultural consumer research in India: A review and analysis. *Journal of International Consumer Marketing*, 7 (3), 53–79.
- Choudhry, Y. A. (1986). Pitfalls in international marketing research: Are you speaking French like a Spanish cow?. *Akron Business and Economic Review*, Winter.
- Clark, T. (1990). International marketing and national character: A review and proposal for an integrative theory. *Journal of Marketing*, Oct., 66–79.
- Cleveland (1979). Robust locally weighted regression and smoothing scatterplots. *Journal of the American Statistical Association*, 74, 829–836.
- Cooper, H. R., Earle, M. D., and Anderson, A., 1991, "Meeting consumer needs in different cultures—twenty years of New Zealand experience in south east asia." Paper given at IUFOST Conference in Toronto, Canada.
- Curia A. V., Hough, G., Martínez, M. C., and Margalef, M. I. (2001). How Argentine consumers understand the Spanish translation of the 9-point Hedonic scale. *Food Quality and Preference*, 12, 217–221.
- Currency Converter, 2005, URL: www.x-rates.com/calculator.html. Forex Capital Markets, New York, NY (December).
- Dijksterhuis, G. (1998). European dimensions of coffee: Rapid inspection of a dataset using Q-PCA. *Food Quality and Preference*, 9 (3), 95–98.
- Druz, L. L. and Baldwin, R. E. (1982). Taste thresholds and Hedonic responses of panels representing three nationalities. *J. Food Science*, 47, 561–569.
- Ennis, D. M. and Rosseau, B. (2004). Motivations for product consumption: Application of a probabilistic model to adolescent smoking. *Journal of Sensory Studies*, 19, 107–117.
- Grunert, K. G. (1997). What's in a steak? A cross-cultural study on the quality perception of beef. *Food Quality and Preference*, 8 (3), 157–174.
- Jaeger, S. R., Andani, Z., Wakeling, I. N., and MacFie, H. J. H. (1998). Consumer preferences for fresh and aged apples: A cross-cultural comparison. *Food Quality and Preference*, 9 (5), 355–366.
- Karahadian, C., 1994, "Impact of global markets on sensory testing programs. The 1994 survey results." IFT Sensory Forum, Number 64.
- Katz, F. (1998). How international companies use research teams. *Food Technology*, 52 (4), 41–44.
- Laing, D. G., Prescott, J., Bell, G. A., Gillmore, R., James, C., Best, D. J., Allen, S., Yoshida, M., and Yamasaki, K. (1993). A cross-cultural study of taste discrimination with Australians and Japanese. *Chemical Senses*, 18 (2), 161–168.
- Laverack, G. R. and Brown, K. M. (2003). Qualitative research in a cross-cultural context: Fijian experiences. *Qual. Health Res.*, 13 (3), 333–342.
- Lawless, H. T. and Heymann, H., 1998, *Sensory Evaluation of Food*, Chapman & Hall, New York.

- Lewis, S. (1997). The language of international research. *Quirk's Marketing Research Review*, 28–30.
- Liang, A. (1996). Cultural nuances a factor in Chinese research. *Strategy*, Aug., 29.
- Lundgren, B. and Jonsson, B., 1978, "Taste discrimination versus Hedonic response to sucrose in coffee beverage: An interlaboratory study." 3 (3), 249–265.
- Marchisano, C., Juyun, L., Hyung, S. C., Dong, S. S., Seon, Y. J., Kwang, O. K., and O'Mahony, M. (2003). Consumers report preferences when they should not: A cross-cultural study. *Journal of Sensory Studies*, 18 (6), 487–516.
- Marinelli, J. and Schleck, A., 1997, "Collecting, processing data for marketing research worldwide." Aug., p. 12.
- McDonald, W. J. (1995). American versus Japanese consumer decision making: An exploratory cross-cultural content analysis. *Journal of International Consumer Marketing*, 7 (3), 81.
- McGorry, S. Y. (2000). Measurement in a cross-cultural environment: Survey translation issues. *Qualitative Market Research*, 3 (2), 74–81.
- O'Mahony, M., 1986, *Sensory Evaluation of Food: Statistical Methods and Procedures*, Marcel Dekker, Inc.
- Pangborn, R. M., Guinard, J. X., and Davis, R. G. (1988). Regional aroma preferences. *Food Quality and Preferences*, 1 (1), 11–19.
- Pawle, J. (1999). Mining the international consumer. *Journal of the Market Research Society*, 41 (1), 19–32.
- Popper, R., Heymann, H., and Rossi, F., 1997, *Three Multivariate Approaches to Relating Consumer to Descriptive Data*, in *Relating Consumer, Descriptive and Laboratory Data to Better Understand Consumer Responses*, A. Munoz, Ed., ASTM International, West Conshohocken, PA.
- Prescott, J. (1998). Comparisons of taste perceptions and preferences of Japanese and Australian consumers: Overview and implications for cross-cultural sensory research. *Food Quality and Preference*, 9 (6), 393–402.
- Prescott, J. and Bell, G. (1995). Cross-cultural determinants of food acceptability: Recent research on sensory perceptions and preferences. *Trends in Food Science & Technology*, 6, 201–205.
- Prescott, J., Bell, G. A., Gillmore, R., Yoshida, M., O'Sullivan, M., Korac, S., Allen, S., and Yamazaki, K. (1997). Cross-cultural comparisons of Japanese and Australian responses to manipulations of sweetness in foods. *Food Quality and Preference*, 8 (1), 45–55.
- Prescott, J., Bell, G. A., Gillmore, R., Yoshida, M., O'Sullivan, M., Korac, S., Allen, S., and Yamazaki, K. (1998). Cross-cultural comparisons of Japanese and Australian responses to manipulations of bitterness in foods. *Food Quality and Preference*, 9 (1/2), 53–66.
- Prescott, J., Laing, D., Bell, G., Yoshida, M., Gillmore, R., Allen, S., Yamazaki, K., and Ishii, R. (1992). Hedonic responses to taste solutions: A cross-cultural study of Japanese and Australians. *Chemical Senses*, 17 (6), 801–809.
- Prescott, J., Young, O., and O'Neill, L. (2001). The impact of variations in flavour compounds on meat acceptability: A comparison of Japanese and New Zealand consumers. *Food Quality and Preference*, 12, 257–264.
- Prescott, J., Young, O., O'Neill, L., Yau, N. J. N., and Stevens, R. (2002). Motives for food choice: A comparison of consumers from Japan, Taiwan, Malaysia and New Zealand. *Food Quality and Preference*, 13, 489–495.
- Prescott, J., Young, O., Zhang, S., and Cummings, T. (2004). Effects of added flavour principles on liking and familiarity of a sheepmeat product: A comparison of Singaporean and New Zealand consumers. *Food Quality and Preference*, 15, 187–194.
- Pring, D. C. (1981). Filling the overseas gaps: The proper approach is the key to finding and buying good international market research. *Advertising Age*, 52.
- Qannari, E. M., Vigneau, E., Luscan, P., Lefebvre, A. C., and Vey, F. (1997). Clustering of variables, application in consumer and sensory studies. *Food Quality and Preference*, 8, 423–428.

- Randy, L. and Heymann, H. (2000). Integration of analytical and consumer sensory data in cross-cultural sensory studies to predict consumer acceptance. *American Journal of Enology and Viticulture*, 51 (3), 283.
- Risvik, E. (1992). Multivariate analysis of conventional profiling data: A comparison of a British and Norwegian trained panel. *Journal of Sensory Studies*, 7, 97–118.
- Rozin, P. and Vollmecke, T. A. (1986). Foods likes and dislikes. *Ann. Rev. Nutr.*, 6, 433–456.
- SCI, 1998, “Cultural differences in sensory perception and acceptance—are they barriers to global brands?” Conference organized by the Sensory and Consumer Sciences Group of the SCI: Oral Abstracts, Belgrave Square, London.
- Schiffman, L. G., Dillon, W. R., and Ngumah, F. E. (1981). *Journal of International Business Studies*, Fall, 127–143.
- Schlich, P. and MacEwen, J. A. (1992). Preference mapping. A statistical tool for the food industry. *Sciences des Aliments*, 12, 339–355.
- Scriven, F. M. and Mak, Y. L. (1991). Usage behavior of meat products by Australians and Hong Kong Chinese: A comparison of free choice and consensus profiling. *Journal of Sensory Studies*, 6, 25–36.
- Segalla, M. (1998). Factors for the success of international teams: The special case of international research projects. *Journal of Managerial Psychology*, 13 (3/4), 133–136.
- Souiden, N. (2002). Segmenting the Arab markets on the basis of marketing stimuli. *International Marketing Review*, 19 (6), 611–636.
- Suknark, K., McWatters, K. H., and Phillips, R. D. (1998). Acceptance by American and Asian consumers of extruded fish and peanut snack products. *Journal of Food Science*, 63 (4), 721–725.
- Taylor, D., 1992, “Pitfalls,” (Chapter 5) in: *Global Software: Developing Applications for the International Market*, Springer-Verlag, New York.
- UNESCO Institute for Statistics, 2004, Youth (15–24) and Adult (15+) Literacy Rates by Country and by Gender for 2000–2004, URL: www.uis.unesco.org. UNESCO Institute for Statistics, Montreal, Quebec, H3C 3J7 Canada, 2005.
- Vigneau, E., Qannari, E. M., Punter, P. H., and Knoop, S. (2001). Segmentation of a panel of consumers using clustering of variables around latent directions of preference. *Food Quality and Preference*, 12, 359–363.
- Yeh, L. L., Kim, K. O., Chompreeda, P., Rimkeeree, H., Yau, N. J. N., and Lundahl, D. S. (1998). Comparison in use of the 9-point Hedonic scale between Americans, Chinese, Koreans, and Thai. *Food Quality and Preference*, 9 (6), 413–419.
- Zimmerman, A. S. and Szenberg, M., 2000, Implementing international qualitative research: Techniques and obstacles. *Qualitative Market Research*, 3 (3), 158–164.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **ARGENTINA**

Guillermo Hough,¹ Andrea Mucci,² and Liliana Graciela Findling³

I. INTRODUCTION

The Argentine Republic is located at the southernmost part of the American Continent. Its area is 3.7 million sq. km, including 964 000 sq. km of the Antarctic Continental area and the South Atlantic Islands. Continental Argentina is 3700 km long, extending between 22 and 55° latitude. This large extension determines great variations in climate, going from subtropical in the North to the cold climate in the South. The prevailing climate is mild. Bear in mind that seasons are reverse to those in the Northern Hemisphere.

The east central part of the country, known as the Pampean plain, extends over 600 000 sq. km and is the main farming, livestock, and industrial region of the country. It concentrates 70 % of the population, 80 % of agricultural production, and 85 % of industrial activity.

According to the last census (2001), the Argentine territory is inhabited by 36.2 million people, and it is divided into 23 provinces and its capital city is Buenos Aires. Spanish is the official language. Its form of government is democratic, with a President and Congress freely elected by the people.

Culturally speaking, the major influence on people's habits and behavior is European. This is explained by Western European immigration in the 18th century and the beginning of the 19th century. This immigration was predominantly Spanish and Italian. Afro-American population originating from the slave trade of the 18th century is practically nonexistent. Indigenous population is small. In the Northeast of the country there is some cultural influence from Brazil and Paraguay, and in the Northwest from Bolivia. Generally speaking, no great differences are to be expected between the Argentine and U.S. population as regards behavior and attitude towards a consumer test. There are some unique issues explained below.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

Argentine population tends to react positively to all products rather than negatively. The culture also allows for different opinions, although there may be a tendency for people to be more reserved and less outspoken about their habits than in other cultures. This should be considered when conducting focus group studies. There is no problem in talking directly to the end user. Also, samples can be shown/presented to be evaluated by the intended user.

2. Days to Avoid Testing

Good Friday, Labor Day (May 1), Christmas and New Year should be avoided for all types of tests. Apart from these days, other holidays are May 25, June 10, June 20, July 9, August 17, October 12, and December 8. These dates should be checked, because sometimes the actual holiday is moved to the closest Monday to make for a long weekend. School holidays are the last two weeks in July (winter holidays) and the months of December, January, and February (summer holidays). Using a holiday or weekend for a consumer test depends on the test and the target subject. Shopping malls and big supermarkets are open on Sundays and holidays, so conducting a central location test within or in the vicinity of these areas may be appropriate, especially if searching for men buying wine, for example.

¹ *Ph.D., Comisión Investigaciones Científicas ISETA, (6500) Nueve de Julio, Buenos Aires, Argentina.*

² *Comisión Investigaciones Científicas ISETA, (6500) Nueve de Julio, Buenos Aires, Argentina.*

³ *Facultad de Ciencias Sociales, Universidad de Buenos Aires, J. E. Uriburu 850, Buenos Aires, Argentina.*

Home tests might be carried out on a Saturday, but generally speaking, people do not like to be bothered at home on a Sunday or holiday.

3. Times of Day Most Appropriate for Testing

People in a big city, such as Buenos Aires, are very busy. If probabilistic sampling of consumers is carried out, it will be easier to find people at their homes after 7 p.m. in the evenings or on weekends. Probabilistic sampling in Argentina is usually for survey work where the testing of the actual product is not done, rather just questions are asked. If home product testing is done, special consideration has to be given to people's sense of insecurity and mistrust.

In Buenos Aires the time of day does not differ from common sense practices applied in other countries, except on weekends when people like their "siestas," i.e., sleeping after lunch. In other cities it would be wise to ask about this custom during the week also.

As regards time of day, consumer tests can be conducted any time during the day, except:

- lunch time (normally between 12:30 and 2 p.m.), and
- dinner time (usually after 9 p.m.)

B. POPULATION PROFILE

1. Demographic Information

(a) Number of inhabitants (2001): 36 million. Of these, 11 400 000 live in Greater Buenos Aires. This means that consumer studies are concentrated in this area. Sometimes extensions are made to the cities of Rosario, Córdoba, and Mendoza, the next biggest cities in the country. Of the total population 28 % are between 0–14 years of age, 62 % are between 15–64 years, and 10 % are over 65 years of age.

(b) Social indexes:

- Percentage of people with unsatisfied basic needs: 27.5 % (Oct. 2002)
- Unemployment rate: 17.8 % (Oct. 2002)
- Infant mortality rate: 16.6 per thousand born live (2000)
- Telephones lines in service: 7 972 634 (set 2000)
- Literacy rate: 96.3 % (1991)
- Beds in hospitals: 153 065 (2000)

To keep an update of demographic and social or other similar indexes the following web pages can be consulted:

- Instituto Nacional de Estadísticas y Censos: <http://www.indec.gov.ar>
- Ministerio de Trabajo: <http://www.trabajo.gov.ar>

2. Economic Classes

Generally speaking, Argentina differs from other Latin American countries in that it has a strong middle class, although in the last years the input gap has increased. The Argentine Marketing Association (Viamonte 723 7° Of.27—Buenos Aires-Telephone: ++ 54 11 4322 3149/4888) has tables that allow predicting a consumer's economic class based on education, job, and assets. It is very difficult for people to admit to their monthly or yearly earnings, as they are scared any information will be used against them by the tax collectors. Classes are: AB: high, C1: middle high, C2: middle, C3: middle low, D1: low plus, D2: low minus, E: marginal.

3. Subcultures

The vast majority of the Argentine population descends from immigrants. These came mainly from Spain and Italy, although immigrants from Arabian and other European countries make up the total. There are very few of Chinese or Japanese origin. Immigration was mostly in the 18th and beginning of the 19th centuries. This explains that 95 % of the population is of Argentine birth. Aboriginal population is scarce. Thus the dominant ethnic origin is White Caucasian. Approximately 90 % of the population declare themselves to be Roman Catholics. As regards distinct groups within the culture that should be tested separately, the most common distinction is socioeconomic. There is no strong influence of any subculture. As mentioned in Demographic Information, approximately one-third of the Argentine population lives in Greater Buenos Aires. This means that consumer studies are concentrated in this area. Sometimes extensions are made to the cities of Rosario, Córdoba, and Mendoza, the next biggest cities in the country.

TABLE 1—*Maximum education level of the Argentine population 15 years and older who no longer attend school or university (data are from 1991).*

<i>Education Level</i>	<i>% of Population</i>
Total who no longer attend	84
Primary incomplete	18
Primary complete	32
Secondary incomplete	13
Secondary complete	12
Tertiary incomplete	3
Tertiary complete	6

4. Literacy Information

- Data from 1991 indicate that 96.3 % of the population 10 years and older, were literate. Table 1 shows education level.

C. GOVERNMENT RELATED ISSUES

There are no explicit government restrictions on consumer tests. General considerations, such as product safety, obtaining consent from parents of small children, etc., are what have to be considered. This is for ethical reasons, not for fear of consumers going to court in Argentina over minor problems, as it is not customary.

D. MEASUREMENT SYSTEM AND CURRENCY

Argentina follows the metric measurement system. The currency is the “peso.” For exchange rates consult: www.x-rates.com/calculator.html.

E. USE OF INTERNET IN CONSUMER TESTING

Currently there are an estimated 7.5 million Internet users in Argentina, and 2 million server clients. Approximately 35 % of Internet users go to cyber-café, that is they don't have a home or work connection. At this time there is a very limited use of Internet for consumer studies in Argentina.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Generally speaking the import of products is unrestricted. If mailing samples from abroad, use the official mail. If private couriers are used, they transport the packet up to Argentine customs. Getting the packet out of customs can be troublesome and expensive. Another system that works is transporting samples personally as luggage. If the research is related to a company that is operating in Argentina, they will surely have an import /export department to deal with the import of samples. For information on passing samples through customs contact the:

Administración Nacional de Aduanas
Azopardo 350
Buenos Aires
Telephone: ++ 54 11 4343 0661

B. SAMPLE STORAGE CONDITIONS

Where consumer tests are usually conducted in Argentina (Buenos Aires, Rosario, Córdoba, or Mendoza), the climate is mild and no special storage conditions are needed. If refrigerated storage is necessary, research agencies will either have their own or know where to obtain it.

C. SELECTION OF TEST SITE/FACILITIES

There are no special considerations for this country. Market research agencies (address of “Cámara Empresas de Investigación Social y de Mercado” given below) can provide necessary facilities for most consumer studies.

D. RECRUITMENT OF PARTICIPANTS

For panelist recruitment, direct communication is used. That is, there is no specific protocol for the culture that is different from that used in the U.S. or Western Europe. One aspect that must be considered is that people are particularly wary about accepting what is told to them as true. For example: if a consumer is asked to participate in a test, and he/she is told that it is not a promotion, rather a research project, they will probably not believe this is true. In the past they have been told "This is not a promotion," and in the end it was. This can lead to few people turning up when contacted previously. Central location tests are usually conducted by renting a hall/facilities in a hotel or from caterers who have these facilities for parties. Recruitment is done by interviewing passers-by in the street. A small gift is offered. If money or a big gift were offered to participate, the commentary would get around and there would soon be a queue of people saying they are heavy users of Camembert cheese, for example. This type of recruitment is time consuming. Apart from identifying the target consumer, his/her willingness to participate is usually small.

Telephones can be used, although not everyone has a phone. There are approximately five people per phone line in Argentina; this is counting all phone lines (homes, shops, industry, government, etc.). So a probabilistic survey cannot be done by phone.

Door-to-door interviewing has the problem of access. Insecurity and afraid of being lied to, make it difficult for good contacts to be made. In apartment buildings, the first contact has to be through the porter, who usually has to be offered a gift or money to allow people to be interviewed close to the street door of the building. In towns with less than 40 000 inhabitants, door-to-door is a lot easier.

Snowball referral can work just as well/bad as in other countries.

As mentioned above, individual contact is difficult in big cities. Groups are particularly helpful on these occasions. Public schools have parents' committees (known as "Cooperadoras") who are always finding ways of collecting funds for the school's maintenance. These committees have proved useful in recruiting participants for consumer tests in exchange of a donation to their funds. Usually they recruit from the families of the children at the school who are motivated to participate, knowing they are helping the school. The best way to contact parents' committees is through company employees with children in school.

One form of recruitment that is used is through individuals who are supposed to have a large database of consumers. These individuals are known as "reclutadoras." They are asked for, say, 100 middle class consumers of brand XXX diet yogurt. It has been demonstrated that quite often those consumers sent to the test have been told what they are supposed to consume: "You go along and say that you are a frequent consumer of XXX diet yogurt, and you'll earn yourself \$10." So special care has to be taken when using "reclutadoras."

No special consents are needed other than the obvious: children from their parents, or written consents for alcoholic beverages or products with ethical considerations. These last include products prepared by technological methods that some consumers might object to, such as irradiation or high in genetically modified ingredients. To contact local market research agencies ask in the:

Cámara Empresas de Investigación Social y de Mercado
 Avda. Mayo 769, Piso 4- Office 41
 (1084) Buenos Aires.
 Telephone: ++ 54 11 4342 0570
 FAX: ++ 54 11 4343 5420
 e-mail: ceim@ciudad.com.ar.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

Literacy is good in Argentina. There are marginal groups of the population that have literacy problems; surveys and tests are conducted among these groups for social or development purposes.

The primary language is Spanish. If questionnaires are translated from English, make sure an Argentinian thoroughly reads the translation to confirm accurate interpretation. There are certain particularities of the way Argentines speak the language.

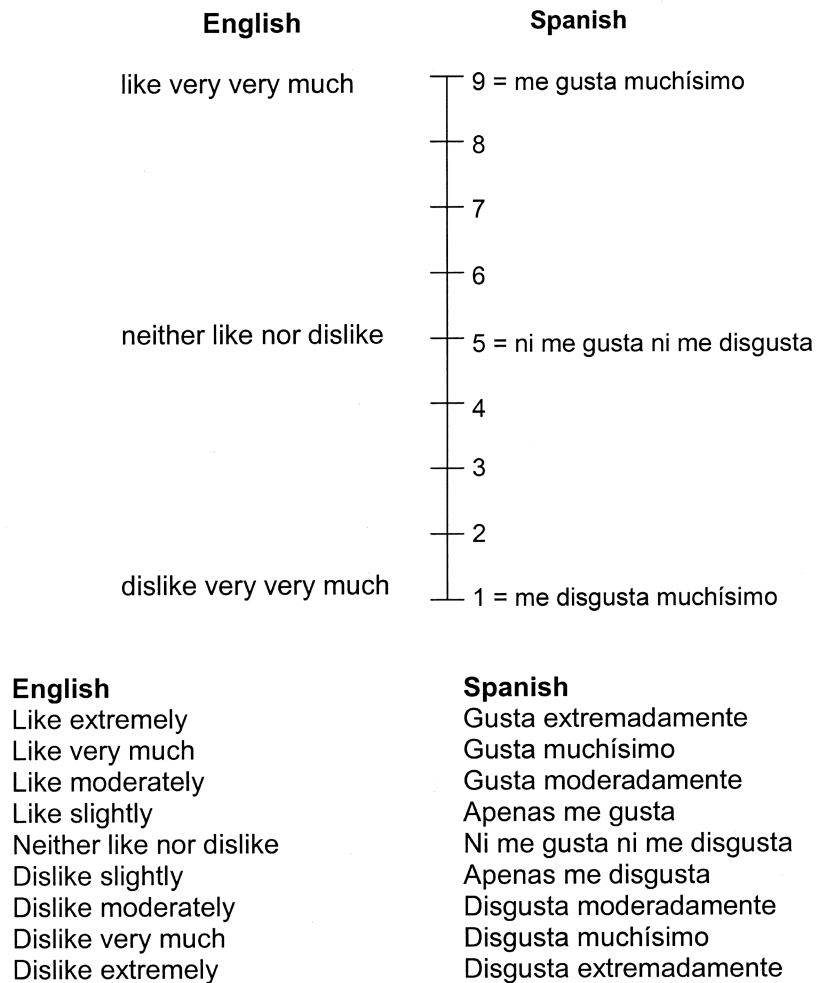
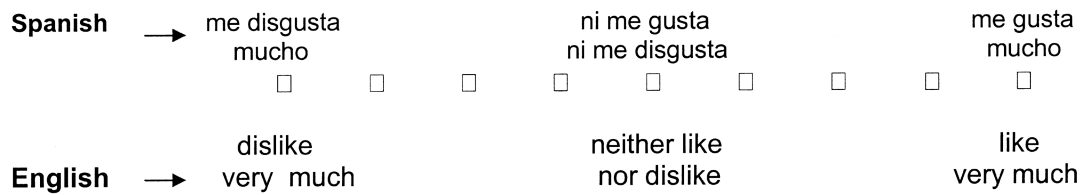


FIG. 1—Unstructured and structured hedonic scales.

B. QUESTIONNAIRE SCALES

1. General

Language is read from left to right. Scales can be orientated vertically or horizontally as in other countries.

2. Scales to Avoid

In the U.S. and other English-speaking countries, the 9-point fully anchored hedonic scale is frequently used. Recent research in our laboratory (Curia et al. 2001) has shown that this scale does not translate adequately to Spanish (see Fig. 1). For example, many consumers consider “moderately” to be less than



FIG. 2—Just about right or diagnostic scales.

“slightly;” or “very much” to be more than “extremely.” Adding to this translation problem, equal distance between the phrases cannot be assumed, so assigning numbers to the phrases and then using these numbers to perform parametric statistical analysis would be a mistake. In Argentina we do not recommend using the 9-point fully anchored hedonic scale. This does not necessarily extend to other Spanish-speaking countries, as in each one language and cultural idiosyncrasies have to be considered. For example, Pedrero et al. (2006) recommend other scales to be used with the Mexican population.

3. Recommended Scales

Suggested scales together with the 9-point fully anchored hedonic scale discussed above are presented in Figs. 1 and 2.

V. TEST ADMINISTRATION

A. LOGISTICS

Logistics do not vary from recommended standard practices normally found in literature. Time of day to perform tests would be: morning from 9 to 12 noon, afternoon from 2 to 8 p.m. Dinner is late in Argentina (usually past 9 p.m.), thus tests can be conducted later into the evening than in other cultures.

B. TEST ADMINISTRATOR

If a local market research agency is to be used, make sure they fully understand the procedure and scales to be used. Some agencies are not familiar with certain aspects of experimental design, such as 3-digit codes or balanced serving orders, and thus are liable to make serious mistakes unless properly trained.

C. PAYMENT/INCENTIVES

Panelist incentives are a delicate issue not fully covered in any culture. Alternatives would be:

- Money. How much is difficult to say. With a globalized economy, money incentives would not be too different than those offered in fully developed countries. Local agencies or company affiliates can advise on the adequate incentive type and amount for the test being conducted.
- A gift. Recommended for company employees, students, or children, not for specially recruited consumers.
- As mentioned above, motivation through help to a nonprofit organization such as a school or church committee. A small gift, apart from the motivation, is recommended.

VI. REFERENCES

Curia, A. V., Hough, G., Martínez, M. C., and Margalef, M. I. (2001). How Argentine consumers understand the Spanish translation of the 9-point hedonic scale. *Food Quality and Preference*, 12, 217–221.

Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY, June 2005.

Instituto Nacional de Estadísticas y Censo, 2005, Datos estadísticos de la República Argentina, URL: <http://www.indec.gov.ar>. INDEC, Ministerio de Economía de la Nación, Buenos Aires, June 2005.

Ministerio de Trabajo de la Nación, 2005, Informaciones y estadísticas. URL:
www.trabajo.gov.ar. Ministerio de Trabajo de la Nación, Buenos Aires, June 2005.

Pedrero-Fuehrer, D. L., and Méndez-Gallardo, C. I., 2007, *International Consumer Product Testing Across Cultures and Countries: Mexico*, ASTM International, West Conshohocken, PA.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **BRAZIL**

Eliete Vaz de Faria¹ and Therese M. Kohl²

ACKNOWLEDGEMENT

The authors wish to thank Ms. Senger for her contribution during the development of this material. Her ideas, data, and support were of critical importance. Thais Senger, Customized Market Research Services, 1315 Oglethorpe Drive, NE, Atlanta, GA 30319.

I. INTRODUCTION

As a consequence of its history and large area, Brazil is a country of contrasts and cultural differences among people from different geographical regions.

Habits, attitudes, and consumer preferences are variable from region to region. It is not unusual for companies, especially large ones, to develop a product differently for two or more markets to meet the specific consumer requirements of different geographical regions. For example, consumers in the Northeast prefer margarines with strong yellow color while consumers in the Southeast prefer clear yellow-colored margarines. The Northeastern consumers prefer more spices in their food, more brightly colored products, more intense perfumes, etc. Therefore, it is strongly recommended that consumer tests be carried out in the region where the product will be sold. This should be applied to every kind of consumer product including food, beverages, personal care, home care, etc.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, Brazilians are willing to partake in product tests. They consider it an opportunity to provide their opinion about the quality of products and explain their preferences. In general, they are very critical and honest in their evaluations. In spite of their willingness to participate in product tests, Brazilians are very concerned about their time and will ask questions about the research, the number of samples to be tested, etc. Therefore, it is recommended that questionnaires be as objective and as short as possible, which will avoid long interviews.

Consumer research can be easily accomplished with techniques that involve direct contact (e.g., interviews, focus groups) or self-administered tests. Brazilian consumers will express their opinions honestly and freely during face-to-face interviews or questionnaires. The value of Internet-driven data collection is likely to vary with the perception of its level of apparent “intimacy” or “direct contact” (i.e., live chat rooms are likely to be vehicles for more candid data collection than bulletin boards with posted questionnaires).

Generally, the purchaser or user of the product under investigation is recruited and interviewed. Direct contact with the female of the household is accepted and expected. Additionally, it is acceptable to recruit males or females for central location tests and home use tests.

With products provided for home use testing, consumers expect to return unused products to the company. For food products, it is acceptable and ethical to instruct the participants to throw away unused food.

2. Days to Avoid Testing

Besides the obvious days to avoid tests, e.g., Sundays and holidays, no clearly defined holidays for nontraditional religions are officially recognized. The “Carnival” (40 days before Easter), Christmas (December 24 and 25th), and New Year’s (December 31st and January 1st) periods should be avoided.

¹ *ITAL-Institute of Food Technology, LAFISE-Physical, Sensory and Statistical Analysis Laboratory. Av. Brasil, 2880, Campinas-SP 13070-178 Brazil.*

² *Consumer Insights Consultant, 533 Lincoln Avenue, Maywood, NJ 07607*

Also, it is important to know that many people plan their vacations in January and July because of the children's school holidays.

3. Times of the Day Most Appropriate for Testing

The best times of the day for consumer testing are mornings (from 9 a.m. up to 11:30) and afternoons (from 1:30 p.m. up to 5:00 p.m.). The times of the day that meals are typically consumed are from 11:30 a.m. to 2:00 p.m. Testing should be avoided during these hours. Some tests can be conducted at night, but only in special cases where a specific target population must be obtained, like professionals that work all day.

B. POPULATION PROFILE

1. Demographic Information

Brazil's population is approximately 184 million (IBGE 2005a), making it the world's sixth largest country in number of inhabitants. Some of the most relevant demographics include (IBGE 2003a, 2003b, 2005a):

- Density: 21.6 inhabitants per km² (2005)
- Demographic growth: 1.4 % per year (2001–2002)
- Life expectancy: 72.1 (women)/64.3 (men) (2000)
- Illiteracy: 16 % (2000)
- Number of households: 50 465 099 (2001–2002)
- Average number of people per household: 3.4 (2001–2002)

The population is concentrated along the coastal strip and in the cities. The main cities and related population areas are (IBGE 2005b):

- Sao Paulo: 10 838 581 inhabitants in 1523 km²
- Rio de Janeiro: 6 051 399 inhabitants in 1182 km²
- Salvador: 2 631 831 inhabitants in 707 km²
- Belo Horizonte: 2 350 564 inhabitants in 331 km²
- Fortaleza: 2 332 357 inhabitants in 313 km²
- Brasilia (DC): 2 282 049 inhabitants in 5802 km²
- Curitiba: 1 727 010 inhabitants in 435 km²
- Recife: 1 486 869 inhabitants in 217 km²
- Porto Alegre: 1 416 369 inhabitants in km²

Other demographic information:

- Approximately 47 % of the population is under age 20 and around 8.5 % is over age 60.
- Approximately 25 % of the population are rural dwellers and 82 % urban, with a large influx of people to urban centers.
- The standard of living of a large proportion of the population is very low while that of the top stratum is extremely high.

Brazilian heritage is varied, with 55 % of European descent, 38 % of mixed cultures, 6 % African, and 1 % Amerindian. There are many Italian, German, and Japanese communities. Sao Paulo has the biggest Japanese community outside Japan.

With such varied heritage and nearly half the population under 20 years of age, it is understood why Brazilians are open-minded to adopting new market trends, technologies, and habits.

Although Brazil has a varied ethnic heritage, it is a strongly nationalistic country. Brazil is the only Portuguese-speaking country in South America and, despite its continental dimensions, Portuguese is spoken throughout all of Brazil. Brazilians do not consider themselves Hispanic and do not like being spoken to in Spanish.

The female participation in the labor force grew dramatically in the 1970s and 80s as a result of new employment patterns and economic pressures on family income. There is a trend of increasing their participation as the heads of the households.

2. Economic Classes

The system used for standard economic classification was introduced in 1996 and was developed by ABEP—*Associação Brasileira de Empresas de Pesquisa* (Brazilian Association of Marketing Research Companies). It is called Brazil Economic Classification Criteria and was developed with the objective of estimating the personal and familiar purchasing power, abandoning the pretension of classifying the population in terms of social classes as previous systems had, and offering a unified system for

TABLE 1—Brazilian population distribution, average of family income, and the score associated to each economical class according to Brazil Economic Classification Criteria (ABEP 2005).

Economical Classification	Points	Average Familiar Income (R\$)	Brazilian Population Distribution (%)
A1	30–34	7793.00	1
A2	25–29	4648.00	5
B1	21–24	2804.00	9
B2	17–20	1669.00	14
C	11–16	927.00	36
D	6–10	424.00	31
E	0–5	207.00	4

(Source: ABEP based on data from IBOPE in 2000.)

segmentation of the Brazilian population according to its consumer capability. It is based on a score defined from good ownership (color TV, radio, number of bathrooms at home, number of cars in the family, maid, vacuum cleaner, washing machine, video/DVD, refrigerator and freezer) and the level of education of the household head (ABEP 2005). The population distribution in Brazil, according to this system, the average of family income, as well as the score associated with each economical class, are presented in Table 1.

There is the trend of the “C” economic class to be on focus by the market, being considered as the class with the most consumer power in Brazil and the one who should drive new product developments and investments in general.

3. Subcultures

It is common to consider the regional differences when planning studies, as the consumer habits are very different from region to region. The main approaches are: Southeast, Northeast, and Southern regions. The recommended cities to test are the main cities in each region, as follows:

Southeast:

- Main cities: São Paulo, Rio de Janeiro, Belo Horizonte, and Vitoria
- Weather: Mild to tropical (both in winter and summer)
- The more wealthy region in Brazil
- High concentration of population
- High migration (specially from Northeast region)
- Strong influence from immigrants (Italians, Arabs, Japanese, Portuguese, and Spanish)
- Biggest Japanese colony in the world (located in Sao Paulo State)
- Biggest potential consumption
- Economically and culturally strong
- Trendsetters

South:

- Main cities: Porto Alegre, Curitiba, and Florianopolis
- Weather: Mild, coldest in the country
- Very European habits (strong immigration influence)
- Highest living standards
- Quality oriented
- High consumption potential

Northeast:

- Main cities: Recife, Fortaleza, Salvador
- Weather: Tropical—hot and dry
- Traditional values
- Strong religious background
- Ethnical behavior related to influence from Africans, for historical reasons, mainly in Salvador City/Bahia State
- Simple consumption habits
- Happy people, open and full of joy
- Growing consumption potential

The country has the following religious groups: Catholics (73.6 % of the population), Evangelic (15.41 % of the population), Allan Kardec Spirit Doctrine (1.38 % of the population), oriental religions (0.25 %

of the population), Judaism (0.06 % of the population) and Afro-Brazilian cults (0.34 % of the population). Other religions were mentioned by 1.25 % of the population during the demographic study in 2000. For 7.26 % of the population no religion was indicated, and 0.23 % could not define their religion (IBGE 2003b).

As previously mentioned, most Brazilians who are related to the Afro-Brazilian cults live in Salvador. Another subculture that may be considered is the European influence in the Southern region.

A general read on the country can be obtained by testing products in the largest cities, Sao Paulo and Rio de Janeiro.

4. Literacy Information

About 16 % of the population 5 years old or above is illiterate (IBGE 2003b). Literacy rates depend on such factors as economical classification, gender, and region. When designing and executing a study, be sure to include only literate individuals when self-administered questionnaires are used, or when a concept needs to be evaluated. Illiterate consumers may be used when a trained interviewer administers the test or reads the concept to them.

C. GOVERNMENT RELATED ISSUES

Imports and exports in Brazil are overseen by several government agencies that in turn report to different Ministries (Agriculture, Health, Finance, Justice). Information related to food and cosmetic legislation in Brazil, including importation, can be obtained on the web site of the National Health Surveillance Agency—ANVISA (www.anvisa.gov.br) and Agriculture Ministry (www.agricultura.gov.br). Contact with the Trade Information Center can be useful also. There are also specialists who regularly deal with such questions (Customs Dispatchers).

D. MEASUREMENT SYSTEM AND CURRENCY

The metric is the measurement system used in Brazil. The currency is the Real, which up to date conversion to other currencies can be obtained in the link <http://www.x-rates.com/calculator.html>.

E. USE OF INTERNET IN CONSUMER TESTING

The use of Internet to recruit consumers or in consumer testing, or both, is not currently used in Brazil. The Internet is not used very often in some marketing research about consumer habits, but there is a trend of increasing the Internet application for consumer-related research.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Test samples usually have relatively low monetary value. Therefore, common shipping procedures using well known shipping companies is possible.

Some food, beverages, and products for human and animal consumption may have special regulations or requirements related to product standard, labeling, sanitary measures, microbiological standards, etc. There are some consulting inter-trade companies that can provide the necessary instructions for shipping. This includes follow-up of all import/export administrative procedures. Contact the appropriate Brazilian government agencies for more information (National Health Surveillance Agency—ANVISA (www.anvisa.gov.br) or Agriculture Ministry (www.agricultura.gov.br), or both.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Although 90 % of the country is within the tropical zone, Brazil has five climatic regions: equatorial, tropical, semiarid, highland tropical, and subtropical. The Brazilian winter is from June to August. In most of Brazil, short tropical rains are frequent all year round. It should be kept in mind that the Northern region of Brazil is hot and humid while the Southern areas are cooler and drier. Pack products accordingly to protect against the elements.

During summer (December to February) the room temperature can stay between 35 to 40°C in some cities of the North-Northeast and Southeast regions. The necessity of special storage conditions should be emphasized depending on the product.

C. SELECTION OF TEST SITE/FACILITIES

It is strongly recommended that the testing be conducted through a local contact. There are several companies providing consumer testing in Brazil. They can provide central locations or laboratories appropriate for the test briefing and target consumers throughout the country. In-home tests can be arranged as well. Further information about market research companies can be provided by the Sociedade Brasileira de Pesquisa de Mercado (Marketing Research Brazilian Society, www.sbpn.org.br; tel 55-11-5575-9719 or 5571-4932), ABEP—Associação Brasileira de Empresas de Pesquisa—2005—www.abep.org, tel 55-11-3078-7744, Fax: 55-11-3168-2026, and the World Association of Opinion and Marketing Research Professionals (www.esomar.org, tel 31-20-664-2141).

D. RECRUITMENT OF PARTICIPANTS

Door-to-door interviews, interviews in central areas with a high concentration of people, and word of mouth are the most frequent recruitment methods used by researchers. Phone interviews are also useful.

For children's studies, the use of mobil/van CLTs is common. Typically, a research van or bus is used as a test facility outside a school or playground. It is important for the supplier to receive permission from the school (and, when recommended, by the parent) before testing.

Although it is acceptable to directly contact either males or females in the household, the female is typically contacted. The research topic will determine which household member should be contacted. Children may be approached to participate in research as well.

Since there is no formal caste system, it is not necessary to obtain political or government approvals for testing.

Written consent is often not required, but recommended. Besides, depending on the kind of test and product to be tested, the approval by an Ethical Commission may be necessary. In general, the test supplier is able to recruit the participants and to get the necessary approvals.

E. OTHER DESIGN/PLANNING ISSUES

Researchers must take tardiness into account as they plan studies. In the Brazilian culture, social contacts and politeness are far more important than meeting schedules and appointment times. Therefore, participants will often show up late for studies. For example, Brazilians may show up at a focus group 40–60 minutes late. Additionally, participants will often fail to show up for appointments within the allotted time if they have other commitments. Therefore, over-recruiting is usually necessary.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The spoken language in Brazil is Portuguese. Except for the Indians, there are no dialects in the country. Questionnaires should always be translated into Portuguese, making sure that the essence of the instructions, questions, and concepts were captured correctly during translation.

When designing and executing a study, be sure to include only literate Brazilians when self-administered questionnaires are used, or when a concept needs to be evaluated. Illiterate consumers may be used when a trained interviewer administers the test or reads the concept to them.

B. QUESTIONNAIRE SCALES

1. General Issues

Consumers are generally more attentive and accurate in understanding verbal instructions than written instructions. Horizontal scales are frequently used, which are read from left to right. Generally, the concept of scaling is well understood. Continuous scales can be freely used and consumers are often comfortable with nonintegral values (i.e., they might express a value as 6.5 rather than just 6 or 7).

2. Scales to Avoid

Line scales should be avoided for low-income consumers because this abstract concept is difficult to understand.

3. Recommended Scales

All kind of scales can be used. In general, Brazilians show good understanding about all scales applied to sensory analysis.

It is common to use scales anchored to a range of descriptive statements such as “completely disagree” or “totally agree.” In some cases, the scale is unidirectional, the respondent being asked to rate the importance of a value on a scale of 1 to 10. Smiling or frowning icons can indicate agreement or disagreement and they are easier/more friendly for the low-income consumers. Facial hedonic scale is very common when the test is applied to children less than 12 years old.

The English 9-point hedonic scale structure was adapted to Portuguese by the Technical Standard Brazilian Association (ABNT 1998), as shown below:

English	Standardized by ABNT (1998)
Like extremely	Gostei extremamente
Like very much	Gostei moderadamente
Like moderately	Gostei regularmente
Like slightly	Gostei ligeiramente
Neither like or dislike	Não gostei nem desgostei
Dislike slightly	Desgostei ligeiramente
Dislike moderately	Desgostei regularmente
Dislike very much	Desgostei moderadamente
Dislike extremely	Desgostei extremamente

Typical “just about right” scales in Portuguese could be presented as follows:

English	Portuguese
(1) Much stronger than what I like	(1) Muito mais intenso do que eu gosto
(2) Stronger than what I like	(2) Um pouco mais intenso do que eu gosto
(3) With the strength that I like	(3) Do jeito que eu gosto
(4) Weaker than what I like	(4) Um pouco menos intenso do que eu gosto
(5) Much weaker than what I like	(5) Muito menos intenso do que eu gosto

V. TEST ADMINISTRATION

A. LOGISTICS

When planning a study in Brazil, it is important to note that participants often show up late for appointments, or they may fail to show up at all. This may be due to heavy traffic—especially in busy cities—or the tendency to value social interaction and personal relationships more than meeting appointments. If a consumer en route to a study meets a friend, she would chat with the friend (rather than risk insulting the friend) and arrive late to the study.

As mentioned above, social contact and personal relationships are very important to Brazilians. Therefore, extra “introduction or warm-up” time needs to be scheduled into focus groups to enhance both the moderator/participant and participant/participant interactions. By allowing extra time for introductions, more comfortable personal interactions develop, and the research can go more smoothly. A lack of social interaction is viewed negatively and the data generated will not be as useful.

In general, there are no special considerations for sample preparation and presentation. The use of consent forms and ingredient statements is always recommended. Discussing this with your field service provider is strongly recommended.

B. TEST ADMINISTRATOR

The test administrator, typically female, should be matched as closely to the economic group as possible. In order to encourage candidness on the part of the consumer (e.g., focus group participant), the administrator should have no overtly vested interest in representing the client.

C. PAYMENT/INCENTIVES

Panelist incentives are frequently gifts or products. Recommendations from a local agency regarding incentives are useful given the widespread market fluctuations and regional preferences. The incentive can be received directly by the participant. In the case of children, incentives might be given to the parent or guardian on behalf of the child or—on agreement with the guardian—the age appropriate incentive may be given directly to the child.

VI. MISCELLANEOUS

Sao Paulo has a significantly more conservative corporate environment than the more casual Rio de Janeiro. Dress appropriately for Sao Paulo (suits, etc.), schedule meetings more tightly, and arrive on time.

Shake hands, exchange business cards, etc., as usual and address contacts formally (e.g., Sir...) without using surnames. The title is normally dropped by the request of your host. Women might greet each other with a light opposite cheek touching (i.e., the “air kiss”). As Brazilians are a family-oriented culture, inquire about your host’s social activities, family, etc.

Give a “thumbs up” sign rather than the “OK” sign (with a circle formed between the index finger and thumb); that is an obscene gesture in Brazil.

VII. REFERENCES

Agência Nacional de Vigilância Sanitária, 2005, URL: <http://www.anvisa.gov.br>. Brasília, DF.

ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS, 1998, Escalas utilizadas em análise sensorial de alimentos e bebidas, NBR 14141. ABNT, São Paulo, 3 pp.

Brazil estimated population, 2005a, IBGE—Instituto Brasileiro de Geografia e Estatística. URL: <http://www.ibge.gov.br>, Rio de Janeiro, RJ, Brazil.

Cities@: information about the Brazilian municipalities, 2005b, IBGE—Instituto Brasileiro de Geografia e Estatística. URL: <http://www.ibge.gov.br/cidadesat/default.php>. Rio de Janeiro, RJ, Brazil.

Critério de Classificação Econômica Brasil, 2005, ABEP—Associação Brasileira de Empresas de Pesquisa. URL: <http://www.abep.org.br>. São Paulo.

Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY.

IBGE—Instituto Brasileiro de Geografia e Estatística, 2003b, Censo Demográfico 2000-Educação. ISSN 0104-3445. Rio de Janeiro: IBGE, p. 41.

IBGE—Instituto Brasileiro de Geografia e Estatística, 2003a, Pesquisa Nacional por Amostra de Domicílios 2002. Síntese de indicadores 2002. Rio de Janeiro: IBGE, ISBN 85-240-3673-7, 205 pp.

Ministério da Agricultura, 2005, Pecuária e Abastecimento. URL: <http://www.agricultura.gov.br>. Brasília, DF.

Sociedade Brasileira de Pesquisa de Mercado, 2005, URL: <http://www.sbpem.org.br>. São Paulo.

The World Association of Research Professionals, 2005, URL: <http://www.esomar.org>. Amsterdam.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **CANADA**

Arlene Cameron,¹ Anne Goldman,² and Chris J. Findlay³

I. INTRODUCTION

Canada is located in the northern half of North America, and covers a land mass of 9 97 610 km². The southern Canadian border of 8892 km is shared with the United States. Much of the Canadian population is concentrated along this border. Canada is divided into ten provinces and three territories. There are six time zones across Canada. Newfoundland is 3 hours and 30 minutes behind Greenwich Mean Time (GMT). Other time zones are the Atlantic (4 hours behind GMT), Eastern (5 hours behind GMT), Central (6 hours behind GMT), Rocky Mountain (7 hours behind GMT) and the Pacific, 8 hours behind GMT.

Canada is divided into several regions, each with a unique climate and landscape. The Pacific Coast has a moderate climate, with relatively dry summers and mild, wet winters. Other geographical areas of interest include the Rocky and Coastal mountain ranges, the plains of Alberta, Saskatchewan, and Manitoba, the rocky Canadian Shield region, and the cold Arctic region, north of the tree line. Only 12% of Canada's land is suitable for agriculture. In general, summer temperatures in the milder regions can reach 35 °C and higher, while winter temperatures of -25 °C are not uncommon.

Canada is essentially stable politically and is undergoing no internal civil conflicts. Canadians as a whole are considered more conservative than their American counterparts. The Canadian infrastructure is highly developed for communication and transportation.

Canadian consumers are similar to other North American cultures (i.e., United States), but some cultural differences may affect research results. Canada recognizes two official languages, English and French. Of Canada's 30 million people, 59 % declare English to be their mother tongue, 23 % state French as their first language and 18 % have more than one first language or their mother tongue is neither English nor French. More than two-fifths of Canadians have one origin other than British, French, or Aboriginal. Canadians take pride in their multiculturalism; Canada became the first country in the world to adopt a multiculturalism policy in 1971.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, honesty is valued and the culture allows for different preferences and opinions. It is appropriate to talk directly to participants of either gender or product end users, although parental consent must be obtained if children are to be used for a study. Perishable food and packaging may be disposed of or recycled through compost or other recycling programs. It may be suitable to donate unopened packages of nonperishable foods to local food banks with the permission of the client.

2. Days to Avoid Testing

Aside from Sundays and religious holidays, testing should be avoided on New Year's Day (1 January), Victoria Day (first Monday preceding 25 May), Fete de la St-Jean-Baptiste (Quebec-24 June), Canada Day (1 July), Civic Holiday (in most provinces-first Monday in August); Labor Day (first Monday in September); Thanksgiving Day (second Monday in October); and Boxing Day (26 December). Other days that may not be appropriate include Easter Monday and Remembrance Day (11 November). Given the right incentives and appropriate hours, CLT testing may be conducted on Fridays and

¹ ACCE, 2575B Dunwin Drive, Mississauga, Ontario L5L 3N9, Canada

² Director of Consumer Guidance Research, ACCE, 2575B Dunwin Drive, Mississauga, Ontario L5L 3N9, Canada.

³ Compusense Inc., 679 Southgate Drive, Guelph, Ontario N1G 4S2, Canada

weekends. When considering mall intercept testing, weekends are busiest and typical retail hours are 10 a.m.–6 p.m. on Saturday and 12 noon–5 p.m. on Sunday.

3. Times of the Day Most Appropriate for Testing

Although daytime sessions between 9 a.m. and 5 p.m. can be used in order to include panelists with daytime commitments, sessions from 4:00 p.m. to 8:00 p.m. are normally used for CLTs. Focus groups are often conducted in the evenings between the hours of 5:00 p.m. and 11:00 p.m.

Typical meal times are 7:00–9:00 a.m. for breakfast, 11:30 a.m.–1:30 p.m. for lunch and 5:00–8:00 p.m. for dinner.

B. POPULATION PROFILE

Detailed, current population information on Canada and its provinces can be found on the Statistics Canada website, <http://www.statcan.ca>, and the Canada Information Office, <http://canada.cio-bic.gc.ca>.

1. Demographic Information (www.cardmedia.com 2005)

Canada has a population of approximately 32 million people, most of who live within 300 km of the country's southern border. The largest city centers in terms of approximate population include Toronto (5.2 million), Montreal (3.6 million), and Vancouver (2.1 million). Approximately 80 % of Canadians live in cities and towns. The average family size is 3.1 persons, including 1.2 children. For consumer testing, a site in English (such as Ontario or Western Canada) and a site in French (Quebec) are recommended if the market in Quebec is important to the client.

2. Economic Classes

According to Statistics Canada, the standard of living is rated sixth in the world, following the United States, Switzerland, Luxembourg, Germany, and Japan. This ranking is based on gross domestic product per capita.

3. Subcultures

Canada has two official languages, English and French. French is spoken by 8.5 million people, 25 % of whom live outside of Quebec. French is the mother tongue of 82 % of Quebec's population. French is the language of choice for testing in Quebec, as mandated by the provincial government unless there is a specific need to test in English, according to client requirements. In Quebec, it is strongly recommended to conduct testing with a French questionnaire and a French-speaking moderator. Fifty-nine (59) percent of the Canadian population declares English as their mother tongue, 23 % state French as their first language, and 18 % have more than one first language, or a mother tongue that is neither English nor French. These include Chinese, Italian, German, Polish, Spanish, Portuguese, Punjabi, Ukrainian, Arabic, Dutch, Tagalog, Greek, Vietnamese, Cree, Inuktitut, and other languages. In instances where specific populations are to be tested and English is not as common as a native tongue, a translator may be required.

Only 19 % of the population declares Canadian as their single ethnic origin. About 17 % claim British Isles only ancestry, and 9 % claim French only ancestry. About 28 % of the population declares origins other than British Isles, French, or Canadian.

Three percent of Canadians belong to one of three Aboriginal groups; of this percentage, 69 % are North American Indian, 26 % are Métis, and 5 % are Inuit.

More than 80 % of Canadians declare they follow the Christian religion, with 47 % Catholics and 36 % Protestants. Other practiced religions include Judaism, Islam, Hinduism, Sikhism, and Buddhism. About 12.5 % of Canadians declare no religious affiliation.

Each region of the country has a unique population profile: (from greatest to least population).

Ontario (population 11 million approximately)

Immigrants were mostly English, Scottish, and Irish after 1779. Today, large numbers of people are of Italian, German, Chinese, Dutch, Portuguese, Indian, Polish, and Caribbean origin. Aboriginal groups represented include the Métis and Inuit. Francophones are the largest language minority. It should be relatively easy to find large ethnic groups for testing (refer to www.statscan.ca or www.mria-arim.ca for assistance in identifying these groups in Ontario and in other provinces). Ontario holds Canada's largest city, Toronto, which is also the provincial capital. The province is the home of the nation's capital, Ottawa.

Quebec (population 5.6 million approximately)

The majority of Quebec residents are of French origin, while other significant groups are British and Amerindian, which includes Mohawk, Cree, Montagnais, Algonquin, Attikamek, Mi'Kmaq, Huron, Abenaki, and Naskapi, as well as Métis and Inuit groups. Since the end of World War II, over 650 000 immigrants from over 80 countries have moved to Quebec, to the city of Montreal in particular. These include Italians, Eastern Europeans, Portuguese, Haitians, Lebanese, South Americans, and Southeast Asians. Quebec City, the capital, has been named the most European city on the North American continent, and has been designated by UNESCO as a World Heritage site, along with Rome, Warsaw, and Jerusalem. Most inhabitants are Francophone, and test administrators will need to conduct testing in French. Panelists should be approached in French as well; it should never be assumed that the participants speak English. One must allow additional time for translation when scheduling the test. There is often more socializing before testing in Quebec than in other provinces.

*Western Canada (population 5.2 million approximately)***Manitoba**

Many early immigrants were British, but today, Manitoba is an ethnically diverse province. There is a large Ukrainian and Mennonite population. About 10 % of the people are of Amerindian or Métis origin. Sixty percent of the population lives in the metropolitan region of Winnipeg, the provincial capital. The second largest city is Brandon.

Saskatchewan

The population of Saskatchewan is just over one million. The Métis were among the first settlers. Saskatchewan is the only province where the majority of population is not of British or French descent. German, Ukrainian, Scandinavian, Amerindian, Dutch, Polish, and Russian, as well as British, French, and many other non-European origins, are represented in this province. Regina, the capital, and Saskatoon are the two main cities.

Alberta

About 44 % of Albertans are of British descent. Other large ethnic groups include German, Ukrainian, French, Scandinavian, and Dutch, with smaller groups of Indigenous or Métis origin. More than half the population live in either Edmonton, the capital, or Calgary. Two-thirds of the people are under 40 years old.

British Columbia

The majority of the population is of British descent; however, there is a significant Asian population. Vancouver has North America's second-largest Chinese community. Other significant groups include people from India and Japan, and Aboriginal people. Sixty percent of the people live in either Victoria, the capital, or Vancouver. The culture in the lower mainland is much like that of the United States west coast.

*Atlantic Canada (population 1.3 million approximately)***Newfoundland and Labrador**

The province of Newfoundland is comprised of the island of Newfoundland and the mainland, Labrador, which is bordered by northeastern Quebec. The population largely descended from settlers from southwestern England and southern Ireland. St. John's is the capital of the island and the largest city. Other major centers on the island include Grand Falls, Windsor, and Corner Brook. The twin towns of Labrador City and Wabush form the largest urban community of Labrador.

Nova Scotia

Eighty percent of the population traces their ancestry to the British Isles, while 18% have some French ancestry. Other significant groups include those of German, Dutch, Polish, Italian, Jewish, Lebanese, Black, Chinese, Indo-Chinese, African, Asian, Aboriginal, and eastern European descent. Halifax, the capital, is the largest metropolitan area, followed by Sydney. Major towns include Yarmouth, Kentville, Bridgewater, Truro, Amherst, and New Glasgow.

Prince Edward Island

Eighty percent of the population is of British origin (mainly Scottish and Irish), while 15 % are of French origin. Five percent of the people speak French, and 38 % are under 25 years old. Charlottetown, the capital, is the only urban center.

New Brunswick

New Brunswick has the highest percentage of Francophones (35 %) outside Quebec. It is Canada's only officially bilingual province. Major cultural groups include French, British Loyalist, Scottish, Irish,

German, Scandinavian, and Asian groups, as well as Aborigines, mostly Mi'Kmaq and Malecite. Saint John is the largest city, followed by Moncton and Fredericton, the capital.

Northern Canada (population 411 000 approximately)

Northwest Territories

About 40 000 people live in the Northwest Territories. Dene, Inuvialuit, and Métis descendants make up 48 % of the population and non-Aborigines the remaining 52 %. Yellowknife, the capital, has a population of about 15 000.

Yukon

Six distinct groups of Athapaskan Indians are represented in the Yukon: Kutchin, Han, Tutchone, Inland Tlingit, Kaska, and Tagish. Approximately 31 000 people live in the Yukon, 23 % of whom are of Aboriginal origin. Sixty percent of residents live in Whitehorse, the capital.

Nunavut

Nunavut is Canada's newest territory. The majority of the population is Inuit, spread out in 28 distant communities. Fifty-six percent of residents are under 25 years old. The capital city is Iqaluit.

4. Literacy Information

Of Canadians aged 15 and older, 51 % have secondary school diplomas or some college, 10 % have Bachelor degrees, and 6 % have advanced degrees. According to Statistics Canada, 22 % of adult Canadians have serious problems dealing with printed material. It is estimated that 16 % of adult Canadians do not have literacy skills necessary to deal with written materials encountered in everyday life. About 7 % of adult Canadians identify themselves as unable to read.

C. GOVERNMENT RELATED ISSUES

The reader is directed to Agriculture and Agri-Food Canada (AAFC), telephone (613) 759-1000, <http://www.agr.ca>, and the Canadian Food Inspection Agency (CFIA), telephone (613) 225-2342, <http://www.cfia-acia.agr.ca>, for more information. The test administrator should pay particular attention to importing alcohol, meat, and dairy products. Specific ingredient approval information is available through the Health Canada website at <http://www.hc-sc.gc.ca>. It should be noted that some products permitted in other countries such as the U.S. might not be permitted in Canada.

D. MEASUREMENT SYSTEM AND CURRENCY

Canada's currency is in Canadian dollars. Conversion tables are found at www.x-rates.com/calculator.html

Officially, Canada follows the metric system for weight, volume, temperature, and measurement. Older consumers sometimes relate better to Imperial measures such as pounds and ounces (weight), fluid ounces and gallons (volume), degrees Fahrenheit (temperature), and inches, feet, yards and miles (measurement).

It is important to note that Imperial measures of volume are different from American measures; for instance, 1 U.S. gallon is equal to 3.7 litres and 1 Imperial gallon is equal to 4.5 litres. It may be necessary to use precise conversion tables that can be found in websites such as www.thetipsbank.com/convert.htm

E. USE OF INTERNET IN CONSUMER TESTING

The use of the Internet in consumer testing is very common. Refer to the MIRA website for more detailed information.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

1. General Issues

Considerations are needed when bringing product/materials into this country. International mail service may be slow, and courier services are recommended. Customs and agricultural inspections may cause delays unless paperwork is filled out correctly. Using a broker with offices in Canada is strongly recommended in order to expedite shipping. Appropriate transportation and storage options

and controls must be considered depending upon specific climactic conditions. Air transport is recommended for speed. The agency selected to conduct the test should provide storage facilities or provide a list of companies that might provide this service.

2. Government Notification/Approval Requirements

Again, the reader is directed to CFIA for information, in particular for alcohol, meat, and dairy products. Each province/territory has its own Liquor Control boards; depending on the test product, these must also be considered. Check for licensing requirements before conducting the test. The reader is directed to the Liquor Control Board of Ontario (<http://www.lcbo.com>), the Liquor Licence Board of Ontario (<http://www.llbo.on.ca>), BC Liquor Stores (<http://www.bcliquorstores.com>), Manitoba Liquor Control Commission (<http://www.mlcc.mb.ca>), Saskatchewan Liquor and Gaming Authority (<http://www.gov.sk.ca/govt/lga>), and Societe des alcools du Quebec (SAQ) (<http://www.saq.com>).

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Products should be stored accordingly to protect against severe weather. Couriers should be used for the transport of products with special temperature requirements.

C. SELECTION OF TEST SITE/FACILITIES

Local affiliates should be contacted for recommendations on test facilities. Most facilities will be found in large urban areas such as Toronto and GTA (greater Toronto area) in Ontario, Montreal, Quebec, Vancouver, British Columbia (from the Western provinces), and possibly Halifax, Nova Scotia, and Saint John, New Brunswick (from Atlantic Canada). These centers are typically used to capture general country variability. The Marketing Research and Intelligence Association, MIRA, is a Canadian body that offers guidelines for market research in Canada. It is recommended that the reader refer to their website for specific information for test sites and facilities <http://www.mria-arim.ca>.

D. RECRUITMENT OF PARTICIPANTS

Standard sampling methods and requirements should be adhered to. It is recommended that the test administrators employ a recruiting agency to obtain panelists. Random recruitment from a telephone database is not recommended. Door-to-door interviews are not widely used. Typical work hours are between 8:00 a.m. and 5:00 p.m. However, shift work is not uncommon, and people may be unavailable in early morning or late evening. Because the majority of Canadian families are from dual-income households, the best time to contact participants may be after work hours in the evening (typically after 7:00 p.m.).

It is acceptable to directly contact either males or females in the household. Children may be approached to participate as well, but parental consent is recommended, depending upon the age of the child; refer to MIRA guidelines. Community organizations and schools can be approached for testing as well.

MIRA guidelines will also indicate when the use of a consent form is needed or is appropriate.

E. OTHER DESIGN/PLANNING ISSUES

It is recommended that the test agency over-recruit panelists by 10–15 %. Increased panelist compensation will better ensure commitment to the test.

In Canada, the legal age for alcohol consumption is either 18 or 19 years of age, depending on the province. Panelists need to meet this age requirement before participating in testing alcoholic beverages. Liability insurance is required for this type of test, among others. Again, refer to MIRA guidelines.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

1. Literacy issues that should be considered

Please refer to Section B, Part 4.

2. Primary Language

Please refer to Section B, Part 3.

3. Other Dialects/Languages

Other dialects/languages that should be considered when testing with this culture (i.e., does the questionnaire need to be in more than one language?).

The questionnaire may need to be in more than one language depending on the target population. The city in which the test is being conducted dictates the need for multiple language questionnaires.

B. QUESTIONNAIRE SCALES

1. General

English and French languages are read from left to right. Both horizontal and vertical scales can be used. Verbal and numerical anchors are appropriate.

- (a) Special instructions needed for this culture (written, verbal)

It should be noted that Canadians generally follow the British English spelling, including words such as colour, flavour, odour, favourite, etc. A questionnaire using the words color, flavor, odor, etc., will be recognized as an American (U.S.) test. Tests conducted in Quebec should be written in French, and reviewed after translation to ensure the meaning of the questions is accurate.

- (b) Special issues to consider in the questionnaire design

Typically, questionnaires for adults are written at a third grade reading level. Questionnaires for children should also be written at an appropriate level. It is not recommended to ask questions about race and other culturally sensitive topics.

- (c) Numbers, colors, shapes, that may/may not be appropriate to use during a test

Numbers 666 (a Biblical reference to end times), 911 (a standard emergency phone number), 13 (a number associated with superstition), and 69 (a number commonly inverted and confused) should be avoided in testing.

2. Scales to Avoid

Refer to the previous section, 1a, 1b.

3. Recommended Scales

Below are examples of hedonic and just about right scales:

Hedonic scale:

- Like extremely
- Like very much
- Like moderately
- Like slightly
- Neither like nor dislike
- Dislike slightly
- Dislike moderately
- Dislike very much
- Dislike extremely

Just about right scale (for thickness):

- Too thin
- Slightly too thin
- Just about right
- Slightly too thick
- Too thick

V. TEST ADMINISTRATION

A. LOGISTICS

Canadians are generally on time for appointments. Reminder calls are appropriate to ensure compliance. It is not appropriate to keep respondents waiting; efficiency and courtesy is valued.

Typically, white disposable containers are used to present samples during a test. Otherwise, proper washing and sanitizing equipment is necessary. Waivers, confidentiality agreements, and consent forms may be necessary. Respondents are usually screened for food allergies; however, an ingredient list should be provided to the test administrator should a question arise from a respondent to ensure panelists do not have allergies to the food products being tested.

B. TEST ADMINISTRATOR

Trained technicians and interviewers should be administering the tests. In certain geographic areas, bilingual technicians and test administrators are necessary to accommodate the respondents' language needs. Male and female interviewers and technicians are equally acceptable to all ages and both genders unless the test product dictates otherwise (i.e., personal care products).

C. PAYMENT/INCENTIVES

Monetary compensation is appropriate for this culture. Typically, panelists should receive compensation in line with the current minimum wage and the specific advice of the testing agency. When testing in the province of Quebec, certain types of compensation or incentives may not be appropriate. It is best to refer to the MIRA website for assistance with this.

If individual panelists are recruited, payment directly to the person is appropriate, regardless of age or gender. However, if the panel consists of a group of individuals from organizations, such as community groups or schools, the test agency may want to consider a donation to the organization instead of individual compensation.

The local test agency/consumer facility can best advise on the adequate incentive type and amount for the test being conducted.

VI. REFERENCES

- Agriculture and Agri-Food Canada (AAFC), 2005, <http://www.agr.ca>
- BC Liquor Stores (<http://www.bliquorstores.com>)
- Canadian Food Inspection Agency (CFIA) <http://www.cfia-acia.agr.ca>
- Canada Information Office, <http://canada.cio-bic.gc.ca>
- Canadian Advertising Rates & Data-Rogers Media, 2005. www.cardmedia.ca
- Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY.
- Health Canada <http://www.hc-sc.gc.ca>.
- Liquor Control Board of Ontario, 2000/2005, (<http://www.lcbo.com>)
- Liquor Licence Board of Ontario (<http://www.llbo.on.ca>)
- Manitoba Liquor Control Commission (<http://www.mlcc.mb.ca>)
- MIRA-AIRM, 2005, URL: www.mria-arim.ca. The Marketing Research and Intelligence Association 410-2175 Sheppard Avenue E. Toronto, Ontario M2J 1W8
- Saskatchewan Liquor and Gaming Authority (<http://www.gov.sk.ca/govt/lga>)
- Societe des alcools du Quebec (SAQ) (<http://www.saq.com>).
- Statistics Canada, 2001, <http://www.statscan.ca>

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **CHINA**

Zi Yang,¹ Shannon Lu,² and Gregg A. Nicoll³

I. INTRODUCTION

The Chinese economy has grown rapidly during the past two decades as a result of the open-door policy towards trade, investment, and intellectual exchange; this has brought China closer economically and culturally to the developed western world. Western culture and imported products have been gradually embraced to varying extents and in different ways. For example, the Chinese people have become more open to expressing their opinions—especially the younger generation. And consumption of consumer goods, including imported products, has dramatically increased during the past 5–10 years; the choice and type of products are increasing daily. Consequently, Chinese consumers have developed many similarities to other countries with regard to the type of product benefits desired. However, the uniqueness of the Chinese culture, the diversity of the people, influences of local traditions and history, economic regional differences, etc., still have a substantial influence on consumer desires and needs. Equally, this uniqueness also influences how consumer research is done within China.

Conducting consumer research in China is not an easy undertaking, especially when considering China has an area of 9 596 960 km², greatly varying climates, and uneven economic development. Confounding this, China has an ethnically diverse population of 1.3 billion people (www.china.org.cn/english/index.html) (2005), who speak Mandarin plus many other local dialects. The majority of consumer research has been conducted within large cities (e.g., Shanghai, Guangzhou, Beijing, Xian, and Sheyang) or the immediate surrounding areas. Conducting consumer research in rural areas—especially distant from the larger urban cities—is difficult and time consuming due to the lack of rapid transportation and consumer research facilities in these areas.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

The majority of Chinese people are willing to participate in consumer studies provided they feel a reputable company is conducting the research, people living in their neighborhood recruit them, and they know exactly what is involved in the study. Study incentive payments are substantial motivators to attract consumer respondents although most of the time, only a small payment is required.

The Chinese people are reserved and, in general, are not use to expressing their opinions openly, especially if it is done in a group setting (e.g., this has a substantial influence on focus groups). In group settings, Chinese respondents will not express their own feelings if a different opinion has already been raised. This does not mean they agree with each other or that they have changed their mind: sometimes they do not want to deliver an “incorrect” opinion when they are not sure about it, they do not want to be seen as contradicting others in the group or the interviewer, etc., and as a result will agree with the group, say what they believe the interviewer wants to hear or simply will just remain silent. Regardless of the reason, this affects the focus group or interview discussion and outcome; utilizing in-depth interviews in combination with focus group discussions, and establishment of positive intra-group dynamics and respondent-interviewer will help to overcome this issue and provide greater consumer insight. In interactive group settings (e.g., focus groups), more warm-up time is needed to establish intra-group dynamics and interviewer-group interactions. If there is a second interview, respondents are more willing to talk and provide information, as they feel more comfortable with the settings, the fellow respondents, and the discussion topics. Very personal questions need to be avoided, e.g., income, housing, personal care product used, especially for the lower income individuals. When answering written questionnaires, Chinese people tend to use the “neutral” rating, avoiding “very good” or “very bad” as answers; rating choices that include the word “extremely” (e.g., extremely

¹ Ph.D., Pfizer Consumer Healthcare, 170 Tabor Road, Morris Plains, NJ 07950

² Ph.D., ASCI Inc., 3 Franklin Court, Montville, NJ 07045

³ Ph.D., The Coca-Cola Company, One Coca-Cola Plaza NW, TEC 538, Atlanta, GA 30313

dislike, extremely like) are frequently ignored by the respondents whether or not it represents their true opinion.

The traditional Chinese do not readily accept new ideas or new products. However, when evaluating these products, the Chinese respondents usually react positively (especially to imported products). This is partly due to an underlying tendency to believe that “tested” products are normally good and are from a decent manufacturer.

China has a heavily diversified culture; this results, at least in part, in major differences between consumers in big cities and those in small towns and rural areas. In addition, there are substantial differences between older and younger respondents; young participants in big cities are very open to expressing themselves—they have confidence and culturally feel it is acceptable to express their opinions on products. Whereas, older people in rural areas can be very reserved and not willing to express their opinions—especially when they perceive it to be different than others in the group setting or not what they perceive the interviewer is expecting to hear.

Respondents in small towns and rural areas have minimal knowledge or experience with survey and product testing. This makes recruiting naïve consumers easier; however, more time is required to explain the study details and what is expected of the participants. Product knowledge and experience by Chinese people tends to be limited, especially in rural areas and small towns. Typically, consumer studies are usually done in or close to large cities, or both; substantially fewer consumer studies are done in rural areas. However, with appropriate consideration for rural issues and conditions, consumer studies can be performed in these locations and have been done previously, especially when involving mass-market products or those specifically targeting rural China. Involving a local representative is extremely helpful when conducting any study in China, especially if a home visit is required. The representatives are typically knowledgeable of the local community, provide a reassurance to reduce participant nervousness, and are more likely to be able to identify local people, schools, and community centers willing to participate.

When conducting studies in China, it is best to talk directly to the participant/product end user; women are free to talk about everything, including some private issues. As a matter of fact, women are frequently the head of the household, thus they have substantial power in making purchase decisions for the family—this also permits samples to be shown and evaluated by the intended user.

Test products are generally considered to be “free” goods by study participants. This makes the collection of unused home and personal care products more difficult as the participants have a strong desire to continue to use the testing product provided no problems have been experienced. Allowing the participants to keep unused test product reduces the level of incentive needed (the opposite of some developed regions).

Consumer studies involving food products necessitate a special awareness—in China it is not acceptable to throw away food. This is especially true for those participants 50 years of age or older who would have experienced a severe lack of food due to the three-year natural disaster in the early 60s. “Throw away” instructions are not usually followed by study participants- and frequently even not followed by the study administrator.

2. Days to Avoid Testing

Three week-long public holidays should be avoided. They are Labor Day (May 1st), National Day (Oct. 1st) and Chinese New Year (usually in January or February). The Chinese New Year is the most important holiday in China; people take vacations, visit family, or simply engage in other activities (cleaning, shopping, etc.). Other short holidays do not have as great an impact on study scheduling. Most people prefer weekday studies; many people have a full time job but somehow can find the time during the weekday for testing. Although weekdays are generally preferred, studies can also be conducted on weekends, especially Central Location Tests (CLT) as it is easier to recruit respondents in shopping centers.

3. Times of the Day Most Appropriate for Testing

The best times to conduct consumer testing are mornings, late afternoon or evenings. The lunch period in China is usually between 11:00 and 1:00, and lasts for 30–45 minutes; many people take naps during lunch. Dinner times are often earlier than those in the western culture countries—typically between 5:00 p.m. and 7:00 p.m. Uniformly across China, the people will try to cooperate with the study times providing their schedule allows. Scheduling an appointment on short notice is acceptable.

B. POPULATION PROFILE

1. Demographic Information

China covers an area of roughly 9.6 million square km, with an east to west distance of 5000 km and a north to south distance of 4050 km. China has a diverse and complex climatic pattern ranging from cold temperatures in the north to tropical conditions in the south; the western regions tend to be drier, while eastern regions more humid. Precipitation varies regionally and temperature ranges from -30°C in the north in January to 36°C in the south during July and August. (http://en.wikipedia.org/wiki/People%27s_Republic_of_China#Geography)

The total Chinese population is estimated to be nearly 1.3 billion with a 1.4 % annual rate of increase (2005). Population in the urban areas is estimated at 37 % of the total. About 94 % of the total population lives on approximately 36% of the land. As of 1987, the Chinese Government recognized 55 minority nationalities, numbering about 70 million people; the minorities are more heavily concentrated in the northwest and southwest.

China, like all large countries, is multi-ethnic, but one ethnic group—the Han Chinese—dominates the politics, government, and economy.

2. Economic Classes

In China, consumer researchers typically have used a classification system based on household income level; other lifestyle classification systems, such as ownership of durables, also have been used successfully. The average estimated per capital disposable income for urban residents is RMB 8472 (about USD 1059) while capital cash income for rural residents is RMB 2622 (about USD 328) (as of 2005). (Resource: <http://www.china.org.cn/english/index.htm>). The income gap and durable good ownership differences are very large between regions and even within the same region. The consumption pattern of consumer goods is largely dependent on the level of income. Employees working for foreign enterprises or joint ventures normally have a significantly higher income compared to those working for the government, state, or local privately owned companies.

3. Subcultures

The formation of subcultures was primarily due to China's long history, tradition, and isolation. In the past, the typical Chinese did not migrate and had very limited media exposure. Consequently, any geographic or natural barrier such as rivers, mountains, or the lack of railways resulted in different patterns of cognition, beliefs, and habits, and thus subcultures. For example, most consumers who grew up in Southern China got used to having rice as their main food; on the other hand, wheat flour is often eaten by consumers from Northern China, regardless of where they live now. Since the early 80s, however, China has been changing dramatically with the "open door" policy. Young generations have started to leave their hometown and have migrated to the East Coast. The development of the transportation system assisted this move. Furthermore, with the development of technology, information is easily received and shared without any delay. Western cultures also played an important role in impacting young generations. As a result of the aforementioned reasons, subcultures tend to be less visible nowadays. However, 20 years of rapid change in China is too short to eliminate these subculture differences. The majority of Chinese 30 years or older still maintain their traditional subcultures to a certain extent. And this change is an on going dynamic situation, resulting in a less obvious subculture difference—yet a continuous self-modifying process.

These subcultures do not have a strong influence on consumer attitudes in participating consumer studies. However, they may affect overall study results as well as segmentation results. Therefore, a careful consideration to subcultures is needed when determining where and when to conduct the research. In general, the individual's habits, attitudes, and beliefs, and the economic, climatic, and the historical conditions they have been exposed to needs to be considered when conducting and interpreting consumer studies in China. It is therefore recommended to ask for people's birth place or the places people lived before the age of 18 as screen criteria, particularly when a product category's acceptance is influenced by geographical location.

One implication of the ethnic and cultural diversity between regions is the need to conduct studies in more than one region and the data analyzed with location as one variable; this is also true even when the target market is a smaller subregion of the country. When conducting consumer research applicable to the entire country, at least one major location should be included that represents the north (Beijing), south (Guangzhou), northeast (Shengyang), southeast (Shanghai), or northwest (Xian). (Visit <http://en.wikipedia.org/wiki/Xi%27an> for more detailed information of each city.) Historically, most studies have been conducted in areas close to the east coast where large numbers of

people live and large volumes of the products are distributed; this can be expected to change gradually as China undergoes further economic and infrastructure development. Mass-market products (e.g., inexpensive food items and personal care items) have been evaluated more often in rural areas compared to other product categories.

The methodology and study design does not differ between rural and urban areas nor between poor and rich areas; however, execution differences do exist and critically influence study success. Additional items for consideration when conducting tests in rural areas include:

- Use of local recruiters.
- A local representative should be presented at the time of the testing.
- A local house/school/community center are the ideal location for testing.
- It is better to have the moderator speak and understand the local dialect.
- Study instructions need to be presented in more detail in order to make sure the respondents follow what is expected of them.
- More warm-up time is needed for qualitative studies.
- Quantitative questionnaires need to be as simple as possible.
- Study equipment and facilities in rural areas are not as good as those in larger cities; expect to make compromises depending on the situation (e.g., in most cases, a one-way mirror is not available, while the recording system must be brought to the test site).
- Consideration must be taken into account for logistic issues for product transportation and storage (e.g., a refrigerator might not be available for some food item storage).

4. Literacy Information

Approximately 73 % (male 84 %, female 62 %) of the Chinese population—age 15 and over—can read and write Chinese; literacy is not a major issue in large cities.

C. GOVERNMENT RELATED ISSUES

Government regulations control the importation and use of products for consumer testing—both local and central government agencies will be involved. Additionally, several different government agencies (e.g., Ministry of Health, China National Light Industry) may also be involved depending on the category of product undergoing testing.

Study products must meet government-mandated safety standards including ingredients used and ingredient levels in the product. Large amounts of imported product are frequently subjected to safety testing by government agencies—the products will be treated as import goods and not formulations/materials for testing. It is strongly suggested that substantial time be allowed for the importation and delivery of the test product.

Although product testing is not heavily regulated in China, a recent government rule introduced by the Statistical Bureau mandates that all human survey study protocols have to be submitted and approved by this bureau. The rule currently applies only to the marketing research agencies; manufacturing companies have not been affected so far. Approval of the protocol by the Statistical Bureau normally takes three to seven working days. The bureau does not comment on the protocol content except for studies involving Chinese economic or human rights issues.

Contact Information:

Ministry of Health of PRC Tel: +861068792114
 More information can be found @ <http://www.moh.gov.cn>
 China National Light Industry Tel: +861068396114
 More information can be found @ <http://www.clii.com.cn>

D. MEASUREMENT SYSTEM AND CURRENCY

The metric system is used in China. Currency is Ren Min Bi (RMB). For currency exchange please use the link: www.x-rates.com/calculator.html.

E. USE OF INTERNET IN CONSUMER TESTING

Internet is widely used in China. Internet has been started for use in recruiting and conducting on-line studies.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

All major international carriers can arrange for study materials and supplies to be delivered to any region in China; the carriers usually have the latest regulations concerning importation of study products into China. Local agency/consumer facility or company affiliate can provide detailed shipment information.

Sometimes when products are shipped into China, government agencies will perform safety tests; the selection of products for evaluation is dependent on the type of product and its anticipated use. Safety evaluation for food products frequently lasts seven to ten days and focuses on microbiological testing; testing times for other product categories varies. The requirement for safety testing applies to large and small amounts of imported products, although most of the time the checking is waved for small quantities.

There is no clear product regulation or clearance process to follow for importing consumer test products into China; no distinction between prototype formulations and commercial products is apparent; inclusion of a formulation sheet with product shipment is recommended.

China imposes import tax duties.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Storage facilities and conditions for study materials are comparable to many developed countries with similar climatic conditions. Product stability in freeze/thaw and hot/humid conditions is the primary consideration when considering if special storage conditions are required.

C. SELECTION OF TEST SITE/FACILITIES

In general, test sites and facilities are similar to those in other countries, although there are fewer available. Most of the larger marketing research facilities in China are equipped comparable to those in western countries and frequently have large multi-purpose rooms, interviewing rooms, and a focus group room with a one-way mirror. Sensory booth facilities are not common in China despite the fact that substantial numbers of food evaluations are being performed.

It is not difficult to find English speakers in various market research agencies. Some of the market research agencies are branch offices of international market research companies. Most local market research agencies provide comparable services.

As in western countries, qualitative studies are usually performed in the research service facility; however, they also have been conducted using local hotels, schools, or community centers. In rural areas where research facilities do not exist, studies are frequently conducted in community centers; when a one-way mirror is not available, the audiences are either in the same room or the room next to it with a closed-captioned TV viewing facility.

Quantitative studies are commonly conducted at home (Home Use Test—HUT) or at a central location (Central Location Test—CLT). For a CLT, they are frequently performed near shopping centers or major streets with walking crowds; renting a local school facility has proved to be a good option. With HUTs, interviewers frequently visit the respondent home, deliver testing products, and collect data. The Yellow Pages list hotel meeting rooms and school classrooms; a local market research agency also can be contracted to arrange for a facility. For agency contact information, please check website URL: <http://cn.market-research-directory.com/sitemap.htm>

D. RECRUITMENT OF PARTICIPANTS

There are no specific government regulations or rules governing the contact or recruitment of respondents for sensory/consumer research studies.

Marketing research agencies frequently offer recruitment services in addition to their other services. The agencies typically have their own recruiting networks with contact people in the various communities; respondent referral is common, while telephone recruiting is not often used. Recruitment in streets is popular in China and the respondents are generally willing to participate if their schedule permits. Recruitment can also be arranged directly by contacting either individuals or social/community groups; the head of the household is typically the first point of contact. Consent documents are not generally used in China for the testing of consumer goods products that are no/low

risk and do not involve highly confidential information. The respondents typically will be given paperwork explaining the study procedure to make sure that they understand what is expected of them; including contact names and addresses is recommended. A respondent's signature is not considered legally binding in China.

E. OTHER DESIGN/PLANNING ISSUES

The official language of China is Mandarin, although there are many dialects used throughout the country. The different dialects should be considered and used when conducting in-depth interviews and focus group discussions; people express their opinions more freely using their own dialects. The written language is the same throughout China.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The literacy rate in China is approximately 73 % (2003).

The official language of China is Mandarin. Despite the various language dialects, written Chinese is the same across the country; Mandarin characters are used and the script is read left to right. Questionnaires should be written in plain simplified Chinese (Mandarin).

B. QUESTIONNAIRE SCALES

1. General

Although the Chinese language is read from the left to the right, the same as in western countries, the scale orientation does not matter. The concept of scales is normally understood, although explained use of the scale is highly recommended.

2. Scales to Avoid

Scientifically sound scales currently in use can also be utilized in China with the appropriate translation of any descriptors or instructions. Consumer research is relatively new to China and a respondent familiarity with—or scale preference—is not typically encountered.

Lucky/unlucky number picking is popular in China; however, there is not any evidence of its effect on number scaling.

3. Recommended Scales

Hedonic scales and attribute/diagnostic scales (absolute or just right) are the most common scales that are successfully used.

A commonly used Just About Right scale in China is:

English	Chinese
Too sweet	Tai tian (太甜)
Just about right	Zheng hao (正好)
Not sweet enough	Bu gou tian (不够甜)

A 5-point hedonic scale used in China is:

English	Chinese
Like very much	Fei chang xi huan (非常喜欢)
Like somewhat	You dian xi huan (有点喜欢)
Neither like/nor dislike	Shuo bu shang xi huan huo bu xi huan (说不上喜欢或不喜欢)
Dislike somewhat	You dian bu xi huan (有点不喜欢)
Dislike very much	Fei chang bu xi huan (非常不喜欢)

A 9-point hedonic scale proved to be most effective in China is:

English	Chinese
Like extremely	Ji xi huan (极喜欢)
Like very much	Fei chang xi huan (非常喜欢)
Like moderately	Xi huan (喜欢)
Like slightly	You dian xi huan (有点喜欢)
Neither like/nor dislike	Shuo bu shang xi huan huo bu xi huan (说不上喜欢或不喜欢)
Dislike slightly	You dian bu xi huan (有点不喜欢)
Dislike moderately	Bu xi huan (不喜欢)
Dislike very much	Fei chang bu xi huan (非常不喜欢)
Dislike extremely	Ji bu xi huan (极不喜欢)

V. TEST ADMINISTRATION

A. LOGISTICS

Studies can be arranged and prepared for with relatively short notice. Study contracting and progression is similar to that in western countries.

Payments are generally expected at the end of the test.

Grouping respondents with large differences in income into one focus group is considered offensive behavior for both the low- and high-income individual. Culture will affect product preparation standards, which needs to be considered prior to conducting the study. There are no special considerations related to product sample serving other than the standard concerns for hygiene with a food testing product.

B. TEST ADMINISTRATOR

Test administrator considerations are similar to western countries; the test administrator should be dressed neatly; a formal personal presence will tend to gain respect and, thus, facilitates the study.

C. PAYMENTS/INCENTIVES

The amount of the incentive depends on the study task and the availability of the target respondents. The common form of payment is usually cash. The incentive is paid to the respondent following completion of the study. In some CLTs with short testing time, respondents will receive small gifts instead of cash, although cash is preferred. Local agency/consumer facility or company affiliate can advise on the adequate incentive type and amount.

VI. REFERENCES

Geographic Information, 2005 URL: <http://www.china.org.cn/english/index/html>

Climatic and demographic information, 2005, URL: http://en.wikipedia.org/wiki/People_of_China

Economic Classes, 2005, URL: <http://www.china.org.cn/english/index.htm>.

Information for different cities, 2005, URL: <http://en.wikipedia.org/wiki/Xi%27>

Ministry of Health of PRC, 2005, URL: <http://www.moh.gov.cn>

China National Light Industry, URL: <http://www.clii.com.cn>

Currency Converter, 2005, URL: www.x-rates.com/calculator.html., Forex Capital Markets, New York, NY.

Marketing Research companies, 2007, URL:
<http://cn.market-research-directory.com/sitemap.htm>

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **FRANCE**

Christel Adam,¹ Grace Brannan,² and Cindy Ward²

I. INTRODUCTION

France is the largest country in Western Europe, with a vast maritime zone (exclusive economic zone extending over 11 million sq. km). The total area is 547 030 sq. km.

Plains cover two-thirds of the total area. The principal mountain ranges are the Alps (of which the highest peak, Mont Blanc, rising to 4807 metres, is the highest mountain in Western Europe), Pyrenees, Jura, Ardennes, Massif Central, and Vosges. Bordered by four seas (North Sea, Channel, Atlantic Ocean, and Mediterranean), France has 5500 km of coastline.

There are three types of climates in metropolitan France: Oceanic in the west, Mediterranean in the south, and Continental in central and eastern France. Generally the winters are cool and the summers mild, but there are mild winters and hot summers along the Mediterranean area.

France has overseas subdivisions (departments): Mayotte, Saint Pierre et Miquelon, Guyane, Réunion, Martinique, Guadeloupe, Nouvelle Calédonie, and Tahiti.

France is a multi-cultural society. From the beginning of the 20th century, immigration has been a phenomenon that distinguishes French society from other European countries, having welcomed more than 4 million foreigners (2004) to citizenship since 1900. At the turn of the 20th century, immigrants were predominantly of Portuguese, Polish, Italian, and Spanish descent. After the mid-20th century, there have been more African (Algeria War) and Asian immigrants (1980s).

France also has an aging population. There is an increasing part of the population over 60 years old, due to the baby-boomers born in the decades immediately following World War II. They currently have significant consumer buying power.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

France is very well known worldwide as a gastronomic country and this has a certain influence in the daily behavior and habits of the consumers. The French are very proud of their cuisine but are very open to all kinds of ethnic foods (i.e., Thai, Tex-Mex, Japanese). This is evidenced by an increase in the number of ethnic restaurants.

The time spent for cooking and eating is very important. The French like to take time to eat (on average a meal takes more than one hour). They have lunch between 1200 and 1400 (noon to 2:00 p.m.), and in the evening they seldom start before 2000 (8:00 p.m.).

Most people seem to react positively to most products but with such a diverse culture, there can be very differing views towards products. For example, there is a strong movement for organic foods. This extends to a negative attitude towards intensive farming and the use of pesticides. This has led to an increase in demand for healthier foods.

In general, when conducting a quantitative consumer test, there may be a tendency for the French to use the middle of the scale to express their liking toward the products (for example, on a nine-point hedonic scale, they tend to use more scores in the middle of the scale, between 3 and 7). This makes it very important to stress the fact that their honest opinion is needed.

¹ *Givaudan France Arôme, 55 Rue de la voie des Bans, B. P. 24, F-95102 Argenteuil Cedex, France*

² *Ph.D., Givaudan Flavors Corporation, 1199 Edison Drive, Cincinnati, OH 45216*

2. Days to Avoid Testing

The following are public holidays in France:

New Year's Day	Jan. 1
Easter Monday	Monday after Easter
Labor Day	May 1
Victory Day	May 8
Ascension Day	3rd Thursday of May
Whit Monday	Monday 50 days after Easter
National Day	July 14
Assumption Day	August 15
All Saints' Day	November 1
Remembrance Day	November 11
Christmas Day	December 25

It is important to note that if a public holiday falls on a Thursday, most of the citizens take a day off on Friday. That is why many people take holidays in May (many public holidays). In addition, some companies are closed between Christmas and New Year.

The following are school holidays in France:

Winter holidays (end of February/beginning of March): 2 weeks

Easter holidays (April): 2 weeks

Summer holidays (July and August): 2 months

Autumn holidays (end of October/beginning of November): 2 weeks

Christmas holidays (end of December/beginning of January): 2 weeks

The French tend not to stay at home during the holidays. Therefore, the agencies may find it difficult or inconvenient to conduct CLTs (Central Location Test) at these times.

The majority of the French are Catholic and therefore fast and abstain from meat on Good Friday. Muslim French observe Ramadan and other Muslim religious holidays.

Note that the test location should be close to a place where you can get a large number of participants to reduce traveling time as much as possible.

3. Times of the Day Most Appropriate for Testing

For working women and men, after office hours and possibly lunch time are appropriate for conducting tests. (Work hours are 9:00 a.m. to 6:00 p.m.) Nonworking women are available and generally very helpful in the morning (9:00 a.m. to 11:00 a.m.) and in the afternoon after lunch (2:00 to 4:00 p.m.). Nonworking men are available anytime.

Tests with kids could be conducted in schools or at an agency (CLT). Consent from the school principal and parents are necessary and relatively easy to obtain. If there are allergens in the product like shrimp powder, etc., the agencies must include this question in the screener.

Lunchtime is noon to 2:00 p.m. Dinnertime varies by household but is normally between 7:30 and 9:30 p.m.

Most private businesses are open Monday to Saturday, from 9:00 a.m. to 6:00 p.m. Government offices are open Monday to Friday. Most colleges have Saturday morning classes.

It is highly recommended that the researcher conducts the CLT at a venue close to the people rather than asking them to come to a more remote location. Doing so may mitigate issues related to traffic conditions and increase participation. Different rooms can be rented: hotel conference rooms, public rooms (get in touch with the town council), or mobile rooms (bus, truck). It is important to ensure that the venue meets the guidelines for conducting a controlled test.

B. POPULATION PROFILE

1. Demographic Information

As of January 1, 2003, metropolitan France had 61.4 million inhabitants, making it the 21st most populated country in the world and the 3rd most populated in the European Union after Germany and the United Kingdom. The overseas departments have 1.7 million inhabitants.

The French population is divided into the following age structures (2004): (1) 0–20 years: 25.4 % (male 7 973 596; female 7 620 135); (2) 20–64 years: 58.5 % (male 17 819 537; female 18 096 889), and (3) 65 years and over: 16.1 % (male 4 032 753; female 5 844 128) (2003 data). The population is estimated to grow at 1 %.

France's female life expectancy is about 83 years (2nd after Japan) and male life expectancy is about 73 years.

The population is 62 % Catholic, 8 % Muslim, 1.3 % Protestant, and 0.7% Buddhist.

For more information about demographics, please consult: www.insee.fr

2. Economic Classes

The population is divided into the following economic classes: farmers (0.6 %), artisans/self-employed (5.7 %), executive (14 %), intermediate profession (20.9 %), workers (26.9 %), and employee (30.1 %) (2002 data: www.insee.fr). The classes were determined based on social and occupational category. Traditionally consumer studies were conducted taking into account social and occupational categories, but it appears today that product consumption is not as linked to these categories. Therefore, consumer targets are now focused on age and frequency of consumption.

3. Subcultures

France has a multi-cultural and multi-ethnic population. Check with your local consultant about possible influences of diversity on marketing or sensory research. Halal or Kosher food may be necessary in particular situations.

Most tests are generally conducted in Paris which is a big, affluent region (Ile de France: Paris and 60 km around). If testing can only be done in one location, Paris is the choice because it is the biggest in terms of population. This will be treated as a “prescreening” consumer test. The local agencies can recommend the final test areas depending on product and target demographic.

The final big consumer test is done in specific regions because of differences in regional tastes and specialities. The principal towns of interests in the other regions are Lille (North), Lyon, Nancy, and Strasbourg (East), Tours, Nantes, and Rennes (West), Toulouse and Bordeaux (Southwest), Marseille and Nice (Southeast), Limoge and Clermont Ferrand (Middle). Consult with your local research agency about convenient sites. When testing in overseas areas (not metropolitan France), keep in mind that although French is currently used, dialects other than French are also used.

4. Literacy Information

Literacy is defined as the population age 15 and over who can read and write. The literacy rate in France is 94.6 % for both male and female (2004).

C. GOVERNMENT RELATED ISSUES

There are no known restrictions on consumer tests in France. However, if products for consumer testing will be sent from a country outside the European Union, the Bureau of Customs will require a health certificate. For frozen products sent with dry ice, a pro-forma invoice is needed.

Contact information:

Customs
 Information Center
 84, rue d'Hauteville—75498 Paris Cedex 10.
 Tel: +33 0825 30 82 63
 Fax: +33 (0)1 53 24 68 30
crd-ile-de-france@douane.finances.gouv.fr
 Agriculture Ministry, Food Department
 251 rue de Vaugirard,
 75732 Paris Cedex 15
 Tel: +33 (0)1 49 55 58 11
<http://www.agriculture.gouv.fr>

D. MEASUREMENT SYSTEM AND CURRENCY

French currency is the euro. A euro is equivalent to 100 cents. For exchange rates consult: www.x-rates.com/calculator.html.

In France, only the metric system is used.

E. USE OF INTERNET IN CONSUMER TESTING

A big percentage of the population are Internet users (24.3 million in 2003) (source: www.internetworldstats.com/eu/fr.htm). Agencies with consumer databases use the Internet to contact people selected for specific tests; they use the Internet to recruit the appropriate target for their tests but also to conduct surveys on consumption habits to test concepts.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

There are a few courier/shipping agencies available. Please ask your local agency contact for recommendations.

In general, care must be exercised when sending products: fresh products must be sent with ice blocks, frozen products must be sent with dry ice, fragile products must be well wrapped (flow pack may be added in the package).

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Generally speaking, the climate poses no major problems for the storage of samples. Specify storage conditions particularly if critical to the product. When renting facilities, make sure you have the proper storage equipment, e.g., refrigerator or freezer.

C. SELECTION OF TEST SITE/FACILITIES

Major food and beverage manufacturers rely heavily on consumer testing before launching their products. There are several local and experienced market research agencies in France offering services such as sensory analysis, focus group discussion, and consumer studies to name a few. The client can provide the test design or the agency can provide the design based on client objectives. One organization that will have information on market research agencies is International Market Research Information (www.imriresearch.com).

D. RECRUITMENT OF PARTICIPANTS

Panelists may be recruited by a variety of means: database, on the street, via phone. Advertisement in the local paper or ANPE (official agencies for employment) seems to be quite effective, as does word of mouth via existing panelists. As always, attention must be given to avoiding sampling bias whatever method is used.

Each interested panelist has to fill in a questionnaire (postal or phone data collection) to provide demographic information such as: identity, age, sex, family situation, socio-professional category, health issues, product consumption, and availability. If you work with a market research agency, they will fulfill your test requirements using their own database.

Once selected, participants may be contacted by telephone, mail, or e-mail. Phone calls may not be appreciated on weekends or after 9:00 p.m. There were 34 million telephone lines in use in 2000. In the same year, mobile cellular phones were used by 34.6 million. Internet users totaled 24.3 million in 2003. All computerized consumers' personal information is submitted to Law 78-17 called the "informatique et libertés."

For testing with children (less than 18 years) a parental authorization is required. Those consumers can be recruited via their parents or directly, working with schools (contact school managers), or activity centers. For testing with older persons (up to 70 years old) it is easier to directly contact retirement houses.

We advise to make consumers sign consent forms, especially parents for kids, specifying that they don't have any allergy.

In general, it is recommended that consumers do not participate in many consumer tests. It allows you to avoid very experienced tasters, because this would not be representative of the population. In addition it is important to be sure that consumers have never been part of a trained panel (NF ISO 8586-1 and -2).

Usually, the panel selected for a given study is made up of at least 60 consumers.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

Literacy is high in France. However, with the existence of multiple recent immigrants it is very important to check if French is understood. In addition, a different language and more visuals or pictures may be required with children.

The primary language is French. While there are still some regions in France where different dialects exist, those dialects are not prominent.

B. QUESTIONNAIRE SCALES

1. General

Questionnaires are either self-administered (CLT) or completed with the help of an interviewer (in the street) during a one-on-one interview. Sometimes self-administered questionnaires can be computerized.

In qualitative tests such as focus groups, participants are asked to express themselves without any limitation. It is neither an interview nor a self-administered test. They do not have to fill in a questionnaire. One situation to note is the tendency of some panelists to be too vocal and thereby dominating the discussion.

2. Scales to Avoid

In general, line scales are not used with consumers (recommended in laboratory/sensory tests).

3. Recommended Scales

French consumers use horizontal and vertical category scales. Participants are asked to put a cross in the box corresponding to their response. Picture scales are used with children. Show cards can be used with consumers when asking them to identify the brands they use. This method is often very useful, taking advantage of visual memory.

(a) Hedonic Scales

The 9-point hedonic scale (1 = dislike very much or extremely, 9 = like very much or extremely) is very common and easily used by French consumer test participants. The 7-point hedonic scale and ranking are also in common use.

The following is a translation for the 7-point and 9-point hedonic scales.

7-Point Scale

Like very much	Très agréable
Like moderately	Agréable
Like slightly	Assez agréable
Neither like nor dislike	Ni agreeable, ni désagréable
Dislike slightly	Assez désagréable
Dislike moderately	Désagréable
Dislike very much	Très désagréable

9-Point Scale

Like extremely	Extrêmement agréable
Like very much	Très agréable
Like moderately	Agréable
Like slightly	Assez agréable
Neither like nor dislike	Ni agréable, ni désagréable
Dislike slightly	Assez désagréable
Dislike moderately	Désagréable
Dislike very much	Très désagréable
Dislike extremely	Extrêmement désagréable

(b) Other Scales of Interest

Just About Right scales may be used on specific attributes. They are used in product development and marketing research to raise or lower the intensity of specific attributes to levels that consumers say will be nearer the optimum. Be aware that JAR scales can induce a bias in the consumer judgment (Earthy et al. 1996): we advise to use them in a second step, after the hedonic rating has been performed on all products

Just About Right Scale

Far too weak	Beaucoup trop faible
Slightly too weak	Un peu trop faible
Just about Right	Juste comme il faut
Slightly too strong	Un peu trop fort
Far too strong	Beaucoup trop fort

Ranking scales: people are asked to compare all the products and to rank them according to their preferences.

Least liked □□□□ Most liked

Le moins bon □□□□ Le meilleur

V. TEST ADMINISTRATION**A. LOGISTICS**

Always visit onsite to check the facility or if not, ask for the floor plan of the testing facility and the appliances, furniture, and equipment available. Obtain detailed information about storage capability. In addition, a separation between the testing room and the preparation room is necessary. It is better if the testing room allows consumers to be isolated to avoid unwanted communication among them.

Samples should be served following standard testing protocols (the more those procedures are close to the consumers' habits the better it is). This includes hygienic preparation and handling of food samples.

The AFNOR (Association Française de Normalisation) association has published a specific standard for consumer testing: "Directives générales pour la réalisation d'épreuves hédoniques en laboratoire d'évaluation sensorielle ou en sale en conditions contrôlées impliquant des consommateurs," XP V 09-500 (2002).

AFNOR
11, avenue Francis de Pressensé
93 571 Saint Denis La Plaine Cedex
Phone: 33 (0) 1 41 62 80 00
Fax: 33 (0) 1 49 17 90 00
<http://www.afnor.fr>

No special product information is required for the participant except allergen information (if they ask for it); however, information may be volunteered if this would help testing. Consumers should be informed prior to the testing session if the duration is more than 10 minutes.

B. TEST ADMINISTRATOR

Interviewers are trained before the study realization. If you work with market agencies to perform a consumer test in different regions, a meeting will be organized with all the interviewers to present the test instructions and procedures. This is important to ensure the same test is performed in the same way in all localizations.

The presence of a field supervisor in every test location is recommended to ensure that the test is completed as planned. Explanation of the objective of the test, the critical points and procedure, and why it is important to stick to the script also need to be discussed during the briefing. All information given to the consumers has to be written to avoid misunderstandings. All omissions, modifications, or accumulations compared to the initial instructions have to be mentioned.

C. PAYMENT/INCENTIVES

A wide variety of payment incentives have proved to be acceptable. These range from hourly pay for "professional panels" to payment in kind of free samples, gifts, and gift vouchers. Such payments

should normally be made to the participant themselves. The local agency/consumer facility or company affiliate can advise on the adequate incentive type and amount for the test being conducted.

VI. REFERENCES

Analyse Sensorielle, Recueil Normes Agroalimentaire, 2002, 6e édition, AFNOR <http://www.afnor.fr>

Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY.

Demographic information, 2005, www.insee.fr.

Earthy, P., Mac Fie, H., and Hedderley, D. (1996). An investigation into question order effects on sensory perception and preference. *Food Quality and Preference*, 7 (3/4), 315.

Evaluation Sensorielle, Manuel Méthodologique, SSHA, 2nd édition, Lavoisier TEC & DOC

Internet users in France: www.internetworldstats.com/eu/fr.htm

International Market Research Megastore, 2005, www.IMRIresearch.com. IMRI Ltd., Loughborough, LE12 8WG, UK.

ISO, 1993, ISO 8586-1, "General Guidance for the Selection, Training and Monitoring of Assessors. Part 1: Selected Assessors."

ISO, 1994, ISO 8586-2, "General Guidance for the Selection, Training and Monitoring of Assessors. Part 2: Experts."

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **REPUBLIC OF INDIA**

Samuel N. Stephen¹ and Patricia A. Keane²

I. INTRODUCTION

The Republic of India is located in South Asia with a coastline of over seven thousand kilometres. India shares its borders with Pakistan, the People's Republic of China, Myanmar, Bangladesh, Nepal, Bhutan, and Afghanistan. Sri Lanka, the Maldives, and Indonesia are the adjacent island nations. India is the second most populous country in the world, with a population of more than one billion, and is the seventh largest country by geographical area. Indian economy is one of the fastest growing economies in the world.

India has a single time zone 5 hours 30 minutes ahead of Greenwich Mean Time (GMT). Daylight saving time is not observed in India. Climate varies from tropical monsoon in the south to temperate in the north. India has three major seasons, viz., summer, winter, and monsoon. The winter season (November to February) is pleasant throughout the country. Regions of the northern part of India remain moderately to extremely cold during winters. The summer season (April to June) is hot in most parts of the country.

Economically, India often seems like two separate countries: "rural India," supported by primitive agriculture and "urban India," one of the most heavily industrialized areas in the world, with an increasingly middle-class population. Agriculture makes up about 25 % of the gross domestic product (GDP) and employs almost 70 % of the population. Vast quantities of rice are grown wherever the land is level and water plentiful; other crops are wheat, pulses, sugar cane, sorghum, and corn. Cotton, tobacco, oilseeds, and jute are the principal nonfood crops. India has emerged to be the world leader in all aspects of tea production, consumption and export, and accounts for 31% of global production. There are large tea plantations in Assam, Karnataka, Kerala, and Tamil Nadu, which provide employment to over one million people. Coffee is grown in the southern states such as Karnataka, Tamil Nadu, and Kerala. India accounts for about 4.5 % of world coffee production.

There is no one "typical" Indian consumer (or view); it is understood that any inferences will represent a range of customs, habits, and underlying implicit values for each culture.

The educated urban consumer in India may have some similarities to other consumers; however, the differences far outnumber similarities both in urban and rural dwellers. There are exceptions to every rule so it is difficult to generalize. India is a republic of 28 states and 7 union territories. It is one of the most ethnically diverse countries in the world and there are literally hundreds of dialects spoken.

Most products of western origins will be marketed to the more affluent and educated Indian consumer, as they are the only ones likely to be able to buy such products.

Indian women make most of the "consumer goods" purchase decisions; their schedules are apt to be extremely busy so timelines may be an issue. In addition, social contacts and polite conversation may delay them in reaching an appointment.

The Indian infrastructure is well developed and has a highly diversified industrial base. Shipments, however, may be delayed due to traffic and customs clearance. The Indian culture and infrastructure—and its effect on research—are discussed in this manual.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General

In general, Indian consumers are honest in their assessments of products, though they would never be rude. They (especially in the South and East) are more interested in ingredients and product

¹ *Simplot Australia Pty. Ltd., Quality & Innovation Division, Chifley Business Park, 2 Chifley Drive, Mentone, VIC 3194, Australia*

² *(retired) TIAX LLC, Sensory Technology Unit, 15 Acorn Park, Cambridge, MA 02140*

composition and are apt to ask many questions. Face-to-face or direct contact techniques tend to produce better results, as the consumers prefer the more personal social aspects of these styles.

It is possible to gather a variety of opinions in focus groups, but individuals with strong personalities tend to dominate the group. Consumers need little prompting to give their opinions though and are independent thinkers who are unlikely to be influenced by what others say. Respectfully handle expressions of different cultural beliefs in focus groups, interviews, etc. For example, eating any food product which contains beef may be considered by a section of Hindus a “taboo,” as cow is considered sacred by Hindus.

Generally, the purchaser or user of the product under investigation is recruited and interviewed, though discussions with household staff may be included as well. Direct contact with the female of the household is accepted and expected if the product is anything other than tobacco and alcoholic beverages. Men are not commonly interviewed or primarily focused on for purchase of personal care or household products. Additionally, it is acceptable to recruit females for Central Location Tests (CLT) and Home Use Tests (HUT).

With products provided for home use testing, especially in the case of food products, it is best to provide the product in individual portions. Recycling of “throwaway” serving containers is not a common practice.

2. Days to Avoid Testing

The primary religion practiced in India is Hinduism (about 80.5 % of the population); however, there are many other recognized religions, such as Islam (about 13.4 % of the population), Christianity (about 2.3 % of the population), Sikhism (about 1.9 % of the population), Buddhism (about 0.8 % of the population) and Jainism (0.4 % of the population) with various holy days (Source: Census of India, 2001). In general, most people do not work on Sundays. Holy days and holidays of even the minority religions are respected (e.g., no testing during the month of Ramadan (Ramzan). Fasting and vegetarian days are common. India has 3 national public holidays. They are Republic Day (January 26), Independence Day (August 15) and Mahatma Gandhi’s birthday (October 2). In addition to these, about 12–15 holidays, which are either regional or religious, are officially observed in individual states. These include, Pongal, which is a Tamil harvest festival (January), Holi, an annual Hindu festival (February or March), the Id-ul-Zuha (also called as Bakrid which falls between January and April according to the Muslim calendar), Good Friday (March or April), Dussehra, occurs 20 days before Diwali, a major Hindu festival (October or November), Children’s Day (November), and Christmas Day. It is desirable to avoid Diwali/Dussehra festival season for at least two weeks, due to lack of availability of people.

3. Times of the Day Most Appropriate for Testing

The best times to conduct testing are late mornings and evenings. For testing of products with women (housewives), it is usually possible to conduct testing while the children are in school or after the evening meal (usually taken around 7 p.m.). For Central Location Testing of products with men and career women, it is ideal to organize testing in the evenings when they get back home after work. Sometimes, Sundays and holidays are preferred. Home placement of product samples for Home Use Test is ideally done during late evenings (after 6 p.m.) when people are back home after work.

B. POPULATION PROFILE

1. Demographic Information

According to the Census of India 2001, the population of India was 1.03 billion, which was comprised of 531.3 million males and 495.7 million females. Thus, as widely believed and expected, India became only the second country in the world after China to officially cross the one billion mark. Although, in terms of population, the U.S. ranks third in the world after India; there is a yawning gap of 746 million between the populations of these two countries. India accounts for a meager 2.4 % of the world surface area of 135.79 million sq. km yet it supports and sustains a whopping 16.7 % of the world population. Almost all of India is inhabited with about 25 % of the people living in cities and towns, the largest of which are Kolkata (Calcutta), Mumbai (Bombay), New Delhi, Chennai (Madras), and Bangalore. Rural Indians live mostly in nucleated villages. The largest growth rates are seen in the larger metropolitan areas like Kolkata.

Most Indians are descendants of the ancient Indus civilization with mixtures of Indo-Aryan, Dravidian, Mongoloid, and others. It is considered one of the most ethnically diverse countries in the world.

The population density of India in 2001 was 324 persons per sq. km, which means that 57 more people

live in a square kilometre area in the country than the number that lived a decade ago.

Age breakdown of Indian population is given below:

Age Group (years)	%
<6	15.93
7-12	15.29
13-18	12.58
19-24	10.02
25-34	15.33
35-44	12.28
45-59	7.45
>60	10.85
Age not stated	0.27

Source: Census of India, 2001.

It is to be noted that over 50 % of the population of India is represented by the age group of 0-24 years. For a comparison, world population statistics indicate that for the age group of 0-14, for example, world—27.8 %, United States of America—20.6 %, and United Kingdom—17.7 % as against India—35.4 % (Census of India 2001; CIA World Fact Book 2005).

It has been estimated that around the year 2000, the world had 986 females to 1000 males. According to the Census of India (2001), the gender ratio stands at 933 females to 1000 males for the country as a whole.

Approximately 72 % of the population are rural dwellers and 28 % urban (Census of India 2001).

The standard of living of a large proportion of the population is very low while that of the top stratum is extremely high. The largest growing group is the middle class. People in the middle class tend to be educated, live in urban areas, and have two salaries in their household. Growing affluent middle class family units are more likely to be interested in convenience items since usually both spouses work. India has large households with most of the family members living together. As per the 2001 census, there are 194 million households with an average size of over five persons (average of 5.3) per home.

Hindi is the official language of the country although the language of government and commerce is English. Most educated people speak English, as it is the language of instruction in most private schools and most scientific and scholarly publications.

2. Economic Classes

Concepts of class and status are still prevalent in India. There still exists a caste system, especially in the rural villages. Targeting specific socio-economic classes (SEC) is strongly recommended. Most import products are likely to be targeted to middle class and above. The middle class segment is estimated to be about 30 % of the population (about 300 million). However, one should not be overly enthusiastic about this figure, because what is middle class to Indian society is not middle class in other societies. It is best to consult your marketing or market research colleagues and affiliates in India, or your research vendor, or both, when attempting to determine which SECs to include in a study. In general, Indians are open to foreign foods as indicated by the phenomenal growth of fast foods.

3. Subcultures

India is one of the most culturally and ethnically diverse countries in the world. India's ethnic, linguistic, and regional complexity sets it apart from other nations. Language, religion, and caste are major determinants of social and political organization within the highly diverse Indian population today. Even within a state or a region, variations in social, economic, ethnic, or other traits distinctive enough to distinguish it from others is prevalent.

India has a diverse list of spoken languages among different groups of people. This may become an issue while designing the questionnaire. In some regions, translation of the questionnaire into more than one language may be required as respondents from the recruiting criteria, for example, age and product users could speak different languages.

The dress, food, art, religion, occupation, and social organizations of the people vary in numerous ways from region to region, but a large number of their features are found to be in common. Indian food is as varied as its terrain and its people. Religion also has a major impact on regional food. Many Hindus are strict vegetarians although some eat fish and chicken. Hindus consider cows sacred. Many

Moslems do not eat pork products. While carrying out consumer research on nonvegetarian foods, the above issues need to be considered.

The Indian culture is also influenced by the caste social system, with each of the thousands of castes most often having its own deity and subculture. The caste system in India is a stratified and hierarchical socio-economic organization of society that evolved as India's ancient civilizations. The caste system in India has undergone significant change since independence and is now illegal. However, it still maintains some influence on the society more in the countryside than in urban settings. Certain foods may be caste appropriate, particularly in the countryside; for example, Brahmins (people belong to this caste category) are vegetarians and avoid meat, while people from the warrior caste (Kshatriyas) eat meat. Therefore, some practical implications may be: (1) Recruitment of people should be based on the foods they consume and the foods being tested. (2) Recruiters and test moderators should be caste compatible with the test subjects. (3) People of similar castes should be grouped together in testing areas. The caste system should not have any impact on recruitment for consumer research in cities. On the other hand, in rural areas, the caste system may even facilitate recruitment; it may be easier to recruit by contacting a caste-based community group in the countryside.

4. Literacy Information

According to the 2001 Census of India, about 65 % of the population are literate. Literacy rates depend on such factors as SEC, gender, and region. When designing and executing a study, be sure to include only literate individuals when self-administered questionnaires are used, or when a concept needs to be evaluated. When illiterate consumers are used, it is recommended that a trained interviewer administer the test or reads the concept to them. Literacy rates vary widely in different regions and states. As per the 2001 Census of India, Kerala State in the south ranks the top with highest literacy rate of 92 % while Bihar State in the north has the least literacy rate of 47.5 %.

Just as the languages in different areas vary, so do consumer and business preferences and marketing practices. Indian consumers' food choices and preferences are known to vary across the country. People living in northern India consume more wheat-based foods, while in southern India, it is rice which is popular. Also, there is a wide variation in terms of food preparation with respect to the rural and urban India. In cities, fast food is becoming popular. According to the AC Neilson India survey, one-third of urban Indians opt for fast food even during breakfast. Urban Indians now find themselves among the "top 10" most frequent consumers of fast food across the globe. This survey also indicates that over 70 % of urban Indians consume food from take-away restaurants once a month or more frequently. (AC Neilson survey—http://www2.acnielsen.com/reports/documents/2004_ap_fastfood.pdf). On the other hand, in small towns and rural India, food preparation from scratch is still prevalent.

C. GOVERNMENT RELATED ISSUES

Imports and exports in India are overseen by several government agencies that in turn report to different Ministries (Agriculture, Finance, Justice); sometimes there are conflicting regulations. Because of the excessive red tape involved in such transactions, there are specialists who regularly deal with such questions (Customs Dispatchers). Several customs clearing agencies, which undertake shipping services too, are available in various parts of the country. A few of them are listed below:

- DHL Worldwide Express, Mumbai (Bombay)
Phone: 91-22-5678 9001
Website: <http://www.dhl.com>
- Airlift & Shipping Service, New Delhi
Phone: 91 11 26788197/23073905
- Evergreen Expo Clg & Fdg Pvt. Ltd., Kolkata (Calcutta)
1, Black Burn Lane, Kolkata-700 012, India
Phone: 91-33-22376305
Fax: 91-33-2215317491
- Gordon Woodroffe Logistics Limited, Bangalore
Jesu Krupa Complex,
29, Airport Road,
Bangalore-560017
Phone: 91-80-2527 59 59
Fax: 91-80-2526 15 40

- A.V. Thomas & Co. Ltd., Chennai (Madras)
174, Thambu Chetty Street,
Chennai-600001
Phone: 91-44-25231892
Fax: 91-44-25247733

If shipments are small and of low monetary value, most U.S. couriers can be used. If the courier is unsure about shipping regulations, the researcher should contact the company's legal department before shipping test product and materials to make sure the transfer is carried out according to local regulations. Hand-carrying sample/test items is strongly discouraged.

India is one of the 142 members of the World Trade Organization (WTO) and a party to the General Agreement on Tariffs and Trade (GATT) and also to a number of its codes. Out of the bodies established under 1979 Multilateral Trade Negotiation (MTN) Agreements and Arrangements, India is a party to various commissions like those on Anti-Dumping Practices, Customs Evaluation, Government Procurement, Import Licensing, Trade and Civil Aviation, and the Commission of Participating Countries.

The following organizations may be useful contacts to address questions about regulations:

- *The Associated Chambers of Commerce and Industry of India (Assocham)*
Corporate House, 147 B Gautam Nagar
Gulmohar Enclave, New Delhi-110 049
Tel: 91-11-26512477-79, 91-11-51643407-10
Fax: 91-11-26512154
E-mail: assocham@nic.in
Website: <http://www.assocham.org>
- *Confederation of Indian Industry (CII)*
India Habitat Centre Core 4A
4th Floor Lodhi Road
New Delhi-110003
Phone: +91-11-24682230-35
Fax: +91-11-24626149
E-mail: ciico@ciionline.org
Website: <http://www.ciionline.org>
- *Federation of Indian Chambers of Commerce and Industry (FICCI)*
Federation House 1 Tansen Marg
New Delhi-110001
Telephone: 91-011-23738760-70 (11 Lines)
FAX: 91-11-23320714, 23721504
E-mail: ficci@ficci.com
Website: <http://www.ficci.com>
- *The Directorate General of Foreign Trade (DGFT)*
Ministry of Commerce
Government of India
Udyog Bhawan, H-Wing, Gate No. 2,
Maulana Azad Road,
New Delhi-110011
Tel: 91-11-23016262
Fax: 91-11-23016225
E-mail: dgft@ub.nic.in
Website: <http://dgft.delhi.nic.in>
- *Confederation of Indian Food Trade & Industry (CIFTI)*
Federation House 1 Tansen Marg
New Delhi-110001
Telephone: 91-011-23738760-70 (11 Lines)
Fax: 91-11-23320714, 23721504
E-mail: ficci@ficci.com
Website: <http://www.cifti.com>

- *Ministry of Health and Family Welfare*
Nirman Bhawan
New Delhi-110011
Phone: 91-11-23061661
Website: <http://mohfw.nic.in>

Food products are regulated by the Ministry of Health and Family Welfare (Prevention of Food Adulteration Act) and must be previously approved for public consumption (approved products have a registration number). Name of manufacturer and list of ingredients must be shown on the package. It is best to contact the above agencies with questions about government agencies.

D. MEASUREMENT SYSTEM AND CURRENCY

In 1956 the Government of India implemented the metric system through the Standards of Weights and Measures Act in an attempt to bring order out of chaos and to help the nation's fledgling industry exchange ideas with its trade partners more easily. Prior to the introduction of the metric system in India, both English and native measures were used, which led to chaos and confusion. India's successful metrication can be used as a special case study in view of the fact that at the time of metrication of the Indian economy, hardly 30 % of the population could read or write. India's metrication efforts, especially its big bang approach, are widely perceived to have been successful and have been used as a role model in many developing countries.

All road signs were changed to the metric system by the mid-1960s. Speedometers and odometers had to change to kilometres. Nowadays, nobody remembers miles anymore—it is viewed as an archaic measurement. However, India is perhaps out of step with the rest of the world in one respect: “lakhs” and “crores” are more commonly used than millions and billions even in the English press. One lakh is one-tenth of a million, while one crore is 10 million. The currency used in India is rupees and paise, 100 paise makes one rupee.

Electric power supply in India is in the form of 230 V, 50 Hz.

E. USE OF INTERNET IN CONSUMER TESTING

Information technology is one of the fastest growing industries in India. Good penetration of the Internet in Indian cities can be found. However, its usefulness for recruitment, particularly to recruit middle and lower-income groups, is still in its infancy stage.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Mail service for packages from international locations is very slow and unreliable. Therefore, couriers such as DHL, Federal Express, and UPS are strongly recommended. No matter what type of mail service is used, however, extra time should be built into timeliness when planning to ship product and materials to India since there are often Customs delays, especially with new or unusual products or paperwork. Lead-time of a few weeks to a month is necessary for product shipment. Additionally, lab analysis of raw materials by the government typically adds a three to five week delay. Customs can hold all products for close inspection. Products may also be subject to excise tax. It is recommended that the test samples be labeled “SAMPLE FOR TESTING ONLY,” which will facilitate faster clearance through Customs.

It should be kept in mind that most of India is hot and humid and may be subject to monsoons. Pack products accordingly to protect against these elements.

Due to varying regulations, it is best to contact your legal department, your research supplier, or one of the agencies listed previously for information specific to your product. They can also direct you to couriers that specialize in the shipment of sensitive products/ingredients.

Government approvals are generally not needed for commercial goods normally found in India. With prototype products used for R&D purposes, the MSDS (Material and Safety Data Sheet) and an introductory cover letter (on company letterhead) should be included both inside and outside of the package. Materials with potential shipment hazards (i.e., flammables), are restricted.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

As mentioned above, most of India is hot and humid. Products must be stored accordingly to protect against the elements. Specialized couriers are needed for shipment and storage of refrigerated products. Finding refrigerated storage can be difficult. Most test sites do not have adequate refrigeration. Supplies may not be available in the form required, for example, getting chopped ice can be difficult since most ice is sold in blocks rather than cubes. Closely monitor storage and shipping conditions for products that may be sensitive to environmental conditions such as temperature, light, etc. It is advisable to approach the research service provider who might provide the storage facilities. Alternatively, refrigerated transportation companies may be willing to rent out a truck for a fee per day. Products may then be transported and stored in the same location.

C. SELECTION OF TEST SITE/FACILITIES

The local affiliate should be contacted for their recommendation on local and reliable test sites/facilities. It is strongly recommended that the testing be conducted through a local contact. Testing in India is much less expensive compared to testing in the West. Getting the “Indian” rate through a local contact can help reduce the cost of testing. Names of available agencies in India can be found under <http://www.esomar.org>. There is a cost associated with this information. As of 2005, there is no market research association in India.

For Central Location Test (CLT) in cities and towns, conference rooms available in hotels can be arranged. However, for CLT involving women respondents, it’s a common practice that people offer their homes for conducting the test. This approach facilitates participation of more respondents residing in the area. Of course, the agency will pay the homeowner for use of their homes.

For Home Use Test (HUT), generally the product samples are provided directly to the respondents through “home placement” method, which expedites the data collection. Indians do not use left hands to give or take any materials. Use your right hand only to touch someone, eat, pass money, deliver samples and questionnaires, or pick up questionnaires. The left hand is considered unclean. Also, many Indians do not wear shoes at home. Follow your host’s example.

In case of testing of alcoholic beverages, although HUT is preferred to CLT, it is preferable to opt for CLT, if the target segment is the low-income group and middle-income group; the reason is that the majority of people from this segment generally do not consume alcoholic beverages at their homes as it’s considered “taboo.”

D. RECRUITMENT OF PARTICIPANTS

Door-to-door interviews are acceptable. More commonly, interviews are set up by contacting people through their clubs, schools, and other organizations. Although most urbanites have telephones, they are apt to be suspicious of this method of recruitment or interview.

For children’s studies, it is mandatory for the supplier to receive permission from the parent before testing. Parents are extremely sensitive especially to what their children eat and may require a detailed list of ingredients, manufacturer’s name and reputation, etc.

Although it is acceptable to directly contact either males or females in the household, the female is typically contacted. The research topic will determine which household member is contacted. Household help may be approached to participate in research as well.

E. OTHER DESIGN/PLANNING ISSUES

Researchers must take tardiness into account as they plan studies. In the Indian culture, social contacts and politeness are far more important than meeting schedules and appointment times. Therefore, participants will often show up late to studies. The best way to ensure timeliness is to pick up the participants from a predetermined spot and drop them back. Additionally, participants will often fail to show up for appointments within the allotted time if they have other commitments. Therefore, over-recruiting is usually necessary.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

India has more languages than any other country. There are 22 languages recognized by the Indian Constitution. These languages are Assamese, Bengali, Bodo, Dogri, Gujarati, Hindi, Kannada,

Kashmiri, Konkani, Maithili, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Santhali, Sindhi, Tamil, Telugu, and Urdu. Hindi is the official and main link language of India, spoken by over 40 % of the population. Its homeland is mainly in Northern India, but it is spoken and widely understood in all urban centers of India. It is written in the Devanagri script, which is phonetic and, unlike English, is pronounced as it is written. In addition to the main languages, there are hundreds of other languages and dialects.

The major regional languages and the cities and states where they are spoken mostly are given below:

Language	City	State
Bengali	Kolkata (Calcutta)	West Bengal
Telugu	Hyderabad	Andhra Pradesh
Marathi	Mumbai (Bombay)	Maharashtra
Tamil	Chennai (Madras)	Tamilnadu
Gujarati	Gandhinagar	Gujarat
Kannada	Bangalore	Karnataka
Malayalam	Trivandrum	Kerala
Oriya	Bhubaneshwar	Orissa
Punjabi	Chandigarh	Punjab
Assamese	Guwahati	Assam

Urdu is also spoken in the states such as Uttar Pradesh, Bihar, Maharashtra, Andhra Pradesh, Karnataka, and West Bengal.

Depending on the target population, English questionnaires may be used. The average person is not used to filling out surveys, though, younger people may be more familiar with them. About 35 % of the Indian population is illiterate. Therefore, determining if your target or test population is likely to be illiterate is strongly recommended. When designing and executing a study, be sure to include only literate Indians when self-administered questionnaires are used, or when a concept needs to be evaluated. Illiterate consumers may be used when a trained interviewer administers the test or reads the concept to them. Most Indians, even the illiterate, understand the concept of scales.

Questionnaires, if translated to Hindi or any other local language, should always be back-translated to English to be sure the essence of the instructions, questions, and concepts were captured correctly during translation. In many cases, the questionnaire may need to be translated into other languages (there are literally hundreds of languages spoken in India) depending on the target population. Responses are much better and more accurate if the questionnaires are translated into the targeted language. Hindi will not, for instance, be appropriate in the southern and eastern part of India. It is helpful to have a translator available at all times.

B. QUESTIONNAIRE SCALES

1. General Issues

Consumers are generally more attentive and accurate in responding to verbal instructions versus written instructions. Language is read from left to right and horizontal or vertical scales can be used. Generally, the concept of scaling is well understood. Although most of the participants, particularly in the lower-income group, are not “literate,” they are fairly conversant with numbers. Continuous scales can be freely used and consumers are often comfortable with nonintegral values (i.e., they might express a value as 6.5 rather than just 6 or 7).

The Indian consumer reacts critically to products, examining them in great detail and asking many questions. The questionnaire needs to be in a simplified form that the average consumer will understand. Short questionnaires are preferred.

While there are many superstitions, they are usually cultural and may be specific to one family. They are likely to be associated more with unlucky/lucky colors and numbers rather than with shapes. While black is considered inauspicious, green is considered for prosperity. If you intend to present any gift to a group, for example, participants of a focus group, wrap gifts in happy or lucky colors such as yellow, red, and green. Do not wrap gifts in unlucky colors such as white or black.

2. Scales to Avoid

Some of the research agencies in India tend to ask the consumers to rate the product, for example, out of 10 marks or 100 marks. These scales should be avoided since they do not measure hedonic rating of

the product being tested. When consumers rate on 10-point or 100-point nonanchored scale, they tend to play the role of a judge and try to evaluate the product analytically rather than the degree of acceptance for which the hedonic scale is ideal.

3. Recommended Scales

The classical 9-point hedonic (semantic differential) scales are recommended. However, when semantic differential scales are used, the participants need to be well informed about the scale. Semi-structured line scales with a few word anchors work very well. Although the scales with word anchored in English will work well in cities, translation into the local language is desirable in small towns and rural areas. A typical 9-point hedonic scale in Hindi is given below:

Hedonic Scale-Hindi translation of terms		
Points	English	Hindi
9	Like extremely	“Bahut adhik pasand hai”
8	Like very much	“Bahut pasand hai”
7	Like moderately	“Thoda pasand hai”
6	Like slightly	“Thoda sa pasand hai”
5	Neither like nor dislike	“Na to pasand hai na hee napasand hai”
4	Dislike slightly	“Thoda sa napasand hai”
3	Dislike moderately	“Thoda napasand hai”
2	Dislike very much	“Bahut napasand hai”
1	Dislike extremely	“Bahut adhik napasand hai”

A typical “Just Right” scale translated in Hindi is given below:

“Just Right” Scale in Hindi		
Sl No	English	Hindi
1	Much stronger than what I like	“Meri pasand se bahut adhik teevrata ka”
2	Stronger than what I like	“Meri pasand se adhik teevrata ka”
3	With the strength that I like	“Meri pasand ki teevrata ka”
4	Weaker than what I like	“Meri pasand se kam teevrata ka”
5	Much weaker than what I like	“Meri pasand se bahut kam teevrata ka”

V. TEST ADMINISTRATION

A. LOGISTICS

When planning a study in India, it is important to note that participants often show up late for appointments, or they may fail to show up at all. This may be due to heavy traffic—especially in busy cities—or the tendency to value social interaction and personal relationships more than meeting appointments. If a consumer en route to a study meets a friend, he/she would chat with the friend (rather than risk insulting the friend) and arrive late to the study.

As mentioned above, social contact and personal relationships are very important to Indians. Therefore, extra “introduction or warm-up” time needs to be scheduled into focus groups to enhance both the moderator/participant and participant/participant interactions. By allowing extra time for introductions and discussion of family (children), more comfortable personal interactions develop and research can go more smoothly. A lack of social interaction is viewed negatively and the data generated will not be as useful.

There are many special considerations for sample preparation and presentation. Dietary restrictions and laws abound. Many Indians believe that any food product that has been opened and “touched” by others is unclean. Discussing this with your field service is strongly recommended. The use of consent forms and ingredient statements is always recommended.

B. TEST ADMINISTRATOR

The test administrator in most cases should be female. Women will speak more easily with another woman and men typically will not care if the administrator is male or female. In order to encourage candidness on the part of the consumer (e.g., focus group participant), the administrator should have

no overtly vested interest in representing the client. It is recommended that the test administrator wear a formal dress that covers well.

C. PAYMENT/INCENTIVES

Panelist incentives are frequently gifts or products, if the participants are middle class or above. Although monetary incentives are more acceptable to the lower SECs, the legal implications need to be checked. It is preferable to give the incentives in the form of gifts. However, for the lower SECs, that is, the daily wage earners, the loss of wages due to his/her participation in the focus group or product testing, is compensated with monetary incentives. Recommendations from a local agency regarding incentives are useful given the widespread market fluctuations and regional preferences. The incentive can be received directly by the participant. In the case of children, incentives might be given to the parent or guardian on behalf of the child or—on agreement with the guardian—the age appropriate incentive may be given directly to the child upon approval from the parent/guardian.

VI. MISCELLANEOUS

India has a very conservative, male dominated, corporate environment. Men dress rather informally for business, usually without a jacket. But expensive shirts and ties are becoming more popular as status symbols among business professionals. Traditionally, Indian women shake hands with foreign women but not usually with men. Educated and more modern women may offer to shake hands with men. Dress appropriately (suits, etc.), schedule meetings more tightly, and arrive on time. Shake hands (right hand only—usage of left hand for social contact is discouraged), exchange business cards, etc., as usual and address contacts formally using surnames. The title is normally dropped by the request of your host. Feet are considered unclean. Pointing feet or shoes at people is considered an insult. Apologize immediately if your feet or shoes touch another person. As Indians have a family-oriented culture, inquire about your host's social activities, family, etc.

VII. REFERENCES

The Census of India, 2001, URL: <http://www.censusindia.net>, November 21, 2006.

Currencies of India, URL: <http://www.rbi.org.in/currency/museum/c-rep.html>, June 8, 2005.

The World Fact Book, 2005, URL: <http://www.cia.gov/cia/publications/factbook>, June 2, 2005.

AC Neilson India Survey, URL:

http://www2.acnielsen.com/reports/documents/2004_ap_fastfood.pdf, November 21, 2006.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **JAPAN**

Aki Nakao¹ and Asako Taniguchi²

I. INTRODUCTION

Japan is located in East Asia and consists of five island districts (Hokkaido, Honshu, Shikoku, Kyushu, and Okinawa), surrounded by the Pacific Ocean, the Sea of Japan, and the Sea of Ohotsuku. The total area is 377 835 sq. km (The World Factbook 2005). Honshu is the largest island with the capital, Tokyo. The climate varies from humid tropical in the south (Okinawa) to humid continental and cool summer in the north (Hokkaido). The climate of Honshu (the main island) is humid continental and warm summers. The official language is Japanese.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General

As with other countries, Japan has a distinct culture, life style, language, etc. Therefore, it is important to have in-depth communication with a research agency in Japan prior to finalizing a research plan. This will allow for discussion on specific differences that may be unique and critical to the research objectives.

Although one-to-one interviewing is still common in Japan for consumer tests, using self-administered questionnaires is recommended for sensory tests. It will minimize the influence of interviewers and allow for honest opinions from the consumers.

Focus groups are also widely conducted in Japan. However, Japanese in general, are quieter and tend to express themselves less than other cultures. A moderator's greatest challenge is to create an environment that allows consumers to express their honest opinions, thus making the discussion effective.

2. Days to Avoid Testing

Tests should be avoided during three major holiday seasons in Japan—Golden Week (end of April-beginning of May), Obon (mid-August), and New Year (end of December through beginning of January). It is difficult to conduct research during these major holidays due to the lack of availability of people. Even home use testing should be avoided because product usage is likely to be different from normal days due to traveling, family gatherings, special occasions, etc.

There are 15 national holidays (as of 2005) (Japanese Holidays and Cultural Events)

- January 1: New Year's Day (Shogatsu)
- 2nd Monday in January: Coming of Age Day (Seijin no hi)
- February 11: National Foundation Day (Kenkoku kinen no hi)
- March (date varies): Vernal Equinox (Shunbun no hi)
- April 29: Greenery Day (Midori no hi)
- May 3: Constitution Memorial Day (Kenpou kinen bi)
- May 4: Citizen's Holiday (Kokumin no kyujitsu)
- May 5: Children's Day (Kodomo no hi)
- July 20: Marine Day (Umi no hi)
- September 15: Respect for the Aged Day (Keirou no hi)
- September (date varies): Autumnal Equinox (Shuubun no hi)
- 2nd Monday in October: Health and Sports Day (Taiku no hi)
- November 3: National Culture Day (Bunka no hi)
- November 23: Labor Thanksgiving Day (Kinrou kansha no hi)
- December 23: Emperor's Birthday (Tennou tanjyobi)

¹ Roche Molecular Systems, Inc., 4300 Hacienda Drive, Pleasanton, CA 94588

² Coca-Cola Tokyo R&D Center, 2-50 Aomi, Kohto-ku Tokyo 135-0064, Japan

It is possible to conduct a test on a national holiday or weekend except for the three major holiday seasons mentioned earlier, depending on the objectives, research plan, and the willingness of the local research agency to conduct the test. A mall test can be conducted on national holidays and weekends, since department stores/supermarkets are usually open.

3. Times of the Day Most Appropriate for Testing

Morning hours between 10–12 noon and early afternoon hours are most convenient for testing with nonworking housewives. When a research requires participation of full-time workers, evenings (7 p.m. or later) are most appropriate since typical business hours are from 9 a.m. to 5–6 p.m. Lunchtime is usually 12–1 p.m. Breakfast and dinner times vary depending on the household.

B. POPULATION PROFILE

1. Demographic Information

Japan has a population of approximately 128 million (as of 2006). The population is not anticipated to substantially change (Japanese Population). Over 12 million live in Tokyo.

Japan is referred to as a “single ethnic” country. Over 98 % of the population is Japanese. Detailed statistics related to Japanese population can be found at <http://www.stat.go.jp/English/index.htm>.

There is no official religion in Japan. However, 84 % of the population is influenced by Buddhism and Shintoism. The Christian population is less than 1 % (The World Factbook 2005).

2. Economic Classes

There is no solid concept of economic classification in Japan since most of the Japanese belong to “mid-class.” When conducting research in Japan, general demographic questions can be asked to find target consumers, such as age, income, education level, occupation, product usage, and purchase behavior. Consult with your local research agency for the best criteria to meet your research needs.

3. Subcultures

Since there are no distinct subcultures that will influence marketing research or sensory evaluation, most of the studies are fielded in the Tokyo metropolitan area where the population density is the highest.

4. Literacy

Literacy rate in Japan is 99 %, due to a compulsory education system for children 7 to 15 years of age. In most cases, researchers do not need to be concerned with illiteracy (The World Factbook 2005).

C. GOVERNMENT RELATED ISSUES

There are no major government restrictions on consumer tests except for the Personal Information Protection Law. A research agency is not allowed to disclose personal information of the participants to the client without consent of the participants. Focus group videotapes are not available outside the local research agency without consent from the consumers.

Needless to say, general considerations, such as product safety and obtaining consent from parents of children participating in research, should always be considered.

Imports and exports in Japan are overseen by multiple organizations that in turn report to different Ministries. Regulations/restrictions have been reduced recently but are still quite complicated. Due to the complexity, rather than directly contacting the Ministries, it is recommended to use a well-established Japanese shipping company that also provides customs clearance services in Japan, and ask the company for the requirements. See the Product Shipment section for the details.

D. MEASUREMENT SYSTEM AND CURRENCY

The SI metric system is used in Japan for measurement. The basic measurements are: grams (weight), metres (length), and litres (volume). Celsius is used for temperature. Japanese are not familiar with English units such as ounces, inches, and gallons. Currency is Yen. See www.x-rates.com/calculation.html for currency conversion rate.

E. USE OF INTERNET IN CONSUMER TESTING

Internet is used more recently for consumer testing and recruiting. The feasibility still depends on the research design, such as target demographic groups, location, and the type of testing. Consult with a local research agency if the research objectives are suitable for an Internet survey.

An Internet survey can reach a large number of consumers in a short period of time; however, disadvantages are also pointed out such as (1) limited demographics of consumers, and (2) possibility of less reliable results due to a less managed environment (Ohsumi 2004). It is difficult to verify that a consumer followed the exact test procedure or rotation order, or both, without the presence of agency staff on site. Therefore, Internet may be useful just to collect information or prescreen participants, or both, but conducting a high quality home use test using Internet is still challenging.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

General courier services can be used for shipment to Japan. It is strongly recommended to contact a shipping agency in the planning stage for shipping requirements and estimated time for customs clearance specific to your products/equipment. Using a well-established shipping company that also provides customs clearance services in Japan may minimize time for planning and overall complexity. In any case, extra time due to unexpected customs delays should be built into the research timeline when shipping products/materials to Japan.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Although Japan is a small country surrounded by seas, the climate is quite different depending on the season and region. Average monthly temperatures vary from -4°C (Sapporo in winter) to 28°C (Okinawa in summer) (Monthly Report of Climate). In summer, the temperature may go up as high as 40°C in the daytime with high humidity. Be sure to specify product storage conditions, if necessary. Temperature controlled courier services are also available in Japan.

C. SELECTION OF TEST SITE/FACILITIES

A list of marketing research agencies can be found in the Japan Market Research Association (JMRA) web site—<http://www.jmra-net.or.jp/index.html>. The web site contains company information such as contact information, size, field of operation (type of tests/researches in which they specialized), and link to their home page.

Consumer tests are common in Japan, but sensory tests are relatively new and there are no “golden standard” methods. Objectives and preferred methods should be thoroughly communicated even when working with a well-established company. The methods must be fine-tuned with local agencies to fit Japanese culture, life style, and product usage.

To select a best site/facility, contact at least two to three agencies and select one that proposes a research plan that truly meets your research objectives. Although not always possible, it is strongly recommended to see the actual testing site beforehand and make sure that the site is free of odor and noise, has sufficient ventilation, and is well equipped (partitions between consumers, spacious prep area, temperature controlling system, etc.).

D. RECRUITMENT OF PARTICIPANTS

As mentioned in the Subculture section, most of the studies are fielded in the Tokyo metropolitan area since there are no distinct subcultures. The next largest cities such as Osaka, Nagoya, Fukuoka, and Sapporo are also used but not so often.

(a) Central Location Test

To recruit consumers for a central location test, a mall/street intercept is most common in Japan, especially in a city area.

Pre-recruiting by telephone can be done for a central location test, but it costs more than a mall/street intercept due to higher incentives and respondents' long commuting time. Even though there are many people in a large city during the daytime, most of them live far from the city.

It is possible, but not easy, to pre-recruit a large number of consumers for a central location test, especially for a multiple-day testing. However, once respondents are recruited, the show up rate is

quite high—95 % or even higher. Japanese do not make commitments easily, but once promised, they execute it unless they encounter an emergency situation.

(b) Discussion Group (Focus Group)

Recruiting for a focus group can be accomplished similarly to central location tests. Since Japanese consumers are quieter and less outspoken in focus group type discussions than some cultures, the screener should include questions to help select articulate consumers. Some examples for the questions are as follows:

- Are you comfortable in expressing your opinion to people whom you met for the first time?
- What do you think about “xxx”? Why?
- If you were to recommend your favorite “xxx” to your friend, how would you describe it?

xxx: a product relevant to your research

(c) Home Use Test

Door-to-door interviewing or a combination of telephone and door-to-door interviewing is often used to recruit participants for a home use test. It is acceptable to directly contact either males or females of a household. Some research agencies have a well-established network of consumer panels that can be utilized for door-to-door interviewing in large scale home use tests.

(d) Tests with Children

Children may be asked to participate in a consumer test, often with the consent of their parents.

(e) Consent Form in General

It is relatively easy to obtain a signed form of confidential agreement, but not common to obtain one for a liability type consent. Since Japanese consumers are not used to sign such liability-type forms for consumer testing, some might refuse participation because they doubt the product safety even though the products are explained to be safe. Furthermore, such “doubt” may lead to some bias toward the test product perception. Consult with a local research agency for use of a liability type consent form and its wording.

When a consent form is required, make sure that the form is easy to understand and makes sense when translated into Japanese. Verbal explanation might be necessary in addition to the form.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

Illiteracy rate is less than 1 % (The World Factbook 2005). Screening for literacy is not usually included in the recruiting screener.

Japanese is the only official language in Japan (The World Factbook 2005). All questionnaires must be translated into Japanese, preferably by a staff with consumer research background. It is extremely important that the instructions, questions, and other written documents such as product concepts, are *correctly* translated. The translation does impact the results and quality of the study.

“Direct translation” does not mean “correct translation.” When translating from other languages to Japanese, using different words/phrases or adding/eliminating words is sometimes necessary because some words/phrases do not exist in Japanese (and *vice-versa*). When translated literally, the original phrase may deliver a different message, be interpreted in a different way, or just sounds strange in Japanese. Therefore, “back translation” to the original language does not guarantee its translation quality, either.

The most important aspect to obtain a high quality translation is to provide sufficient background information to the translator such as research objectives, expected outcome, and profile of the participants. When a product concept/description is used in a research, identify the key words and background. With such information, the translator will be able to select the most appropriate words/phrases out of several options. In other words, without understanding of the objectives and the research design, it is impossible to translate the questionnaire appropriately. Therefore, using a translator who has experience in consumer research is highly recommended rather than looking for a person with a general translation certificate.

B. QUESTIONNAIRE SCALES

1. General

Scales can be oriented vertically or horizontally. Similar to other countries, “halo effect” is observed for Japanese consumers. For example, if a consumer likes a product, he/she might rate most of the

attributes for that product positively, just to make his/her answers consistent with the overall liking score, thus sometimes making it difficult to truly evaluate several attributes in one study.

2. Scales to Avoid

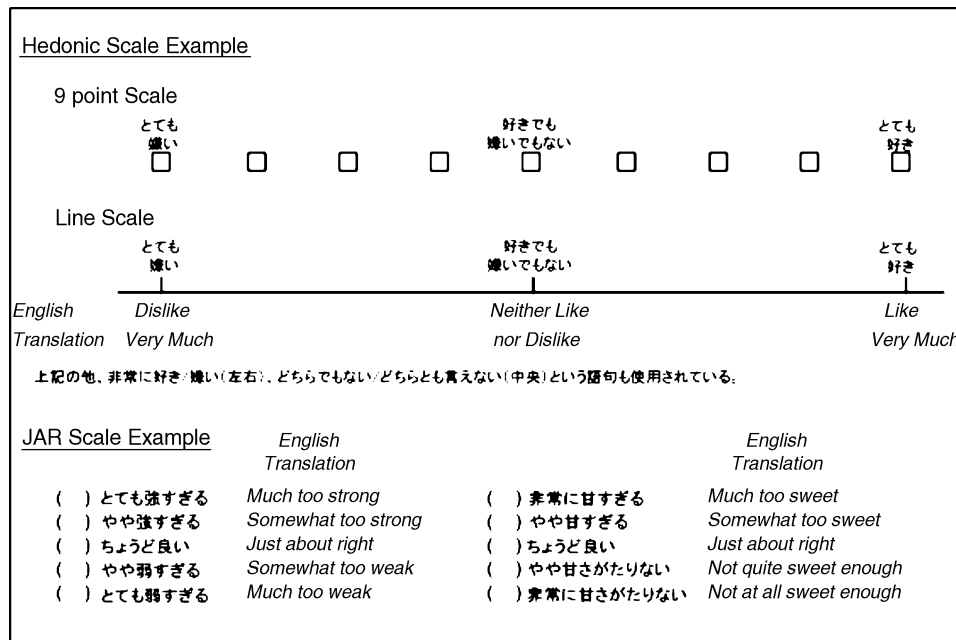
Any questions/scales that do not have appropriate Japanese translation should be avoided. Ask a local agency if all the questions/scales make sense in Japanese and are easy to understand.

Any “picture/drawing” scales such as face scales are not recommended, since people might interpret each picture/drawing differently (Sensory Evaluation Practices 2004). Using such a “drawing/picture” scale created in a different country can be even worse due to differences in the cultures.

3. Recommended Scales

With a relatively short history of marketing/consumer research in Japan, there are no golden standard scales to measure consumer acceptance or sensory intensity. As mentioned earlier, if a scale can be translated into Japanese appropriately and easy to understand for the Japanese target consumers, it would be appropriate to use. Researchers are encouraged to work with the local agency to determine if a proposed scale(s) is appropriate in Japan.

The following are some examples of scales that are used in Japan. Other scales could be used.



Although the 9-point hedonic scale with nine different hedonic wording is widely used in English-speaking countries, a caution should be made about its Japanese translation since there is no Japanese word that clearly separates “very much” from “extremely.” To avoid the issue of “very much” and “extremely,” an anchored scale as shown above or 7-point hedonic scale is often used.

The seven phrases for the 7-point hedonic scale are dislike very much, dislike (moderately), dislike slightly, neither dislike nor like, like slightly, like (moderately), and like very much.

The 5-point just-about-right (JAR) scales can be used. Some examples are shown above. To measure intensity, a line scale with anchors can also be used.

V. TEST ADMINISTRATION

A. Logistics

Logistics in Japan do not vary distinctly from normal practices. Some minor considerations are summarized below.

- Many people live outside of “center of the city” area. It is possible but not easy to prerecruit a large number of consumers for a central location test.
- In Tokyo, the largest city in Japan and where a majority of consumer tests are conducted, real estate and office rentals are extremely expensive. Most of Japanese research agencies have limited

storage and testing space. Utilizing an outside storage facility also is quite expensive. Shipping only a minimal amount of products/equipment will save on research costs and will enable easier/faster logistics. Obtaining a floor plan of the testing facility/storage is also useful.

B. TEST ADMINISTRATOR

Provide sufficient information to a local research agency in order for them to fully understand the objectives, procedure, and scales to be used. Sensory test practices in Japan are still evolving. It is strongly recommended that you explain not only the detailed procedure but also why the specific procedure needs to be followed. Using three-digit codes, following balanced serving orders, and installing booth partitions are good examples. Unless they understand why these protocols are necessary, the local agency might not exactly follow a request, or simply use an alternative solution the agency deems appropriate. In other words, once they understand “why it is critical,” Japanese tend to strictly follow the requests and make every effort to meet the objectives.

C. PAYMENT/INCENTIVES

Gift certificates and prepaid book tickets are the most common form of incentives for participation. The amount varies depending on the consumer test design such as recruiting criteria and required time for testing. For a test with children, incentives might be given to the parent or guardian on behalf of the child.

VI. BIBLIOGRAPHY

Official Website of Japan Marketing Research Association, Tokyo, Japan

<http://www.jmra-net.or.jp/index.html>

Accession Date: April, 2005

Consumer Privacy in Japan and New Japanese Personal Information Protection Law

http://www.jmra-net.or.jp/guideline/kojin/*kojin.html

Accession Date: April, 2005

VII. REFERENCES

Japanese Holidays and Cultural Events, URL: <http://web.mit.edu/jpnet/holidays/index.shtml>, MIT Japan Program, Madison, Accession Date: April, 2005

Japanese Population, URL: <http://www.stat.go.jp/english/index.htm>, Japanese Ministry of Internal Affairs and Communications, Tokyo, Japan, Accession Date: April, 2005

Monthly Report of Climate-Temperature, Precipitation and Sunshine Duration, URL: http://www.data.kishou.go.jp/normal-e/mrep_e.html, Japan Meteorological Agency, Tokyo, Japan, Accession Date: April, 2005

Ohsumi, N., 2004, “A Systematic Study to Improve Reliability and Quality of Internet Surveys,” URL: <http://www.jmra-net.or.jp/book/internet.html>, Accession Date: April, 2005

Sensory Evaluation Practice, H. Stone and J. Sidel, Academic Press, 3rd ed., May 5, 2004.

The World Factbook 2005—Japan

URL: http://www.cia.gov/cia/publications/factbook/*ja.html, CIA, Washington, D.C., Accession Date: April, 2005

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **REPUBLIC OF KOREA**

Kwang-Ok Kim,¹ Sang Sook Kim,² Seojin Chung,³ and Grace Brannan⁴

I. INTRODUCTION

Republic of Korea, also known as South Korea, is situated on the Korean Peninsula, which spans 1100 kilometres from north to south. The Korean Peninsula is located on the northeast section of the Asian Continent and is adjacent to China and Japan. South Korea's total area, including over 3000 islands, is about 99 373 km². Korea is politically separated into North and South Korea, which are two independent countries. Approximately 45 % of the Korean Peninsula constitutes the territory of South Korea (<http://www.korea.net> by Korean Overseas Information Service).

South Korea is divided into two distinct regions: central and south. The central region consists of the Seoul (the capital city) metropolitan area, Gyeonggi-do Province, Chungcheong-do Province to the south, and Gangwon-do Province to the east. Seoul is the center of all political, economic, and cultural activities and its population is one-quarter of the whole South Korean population. The south region includes the Gyeongsang-do Province to the southeast, Jeolla-do Province to the southwest, and Jeju-do Province which lies off the south coast.

The climate of South Korea is characterized by four distinct seasons: spring, summer, autumn and winter. August is the hottest month with mean temperature ranging from 19–27°C. January is the coldest month with mean temperature ranging from –8°C to 7°C. Annual precipitation is about 1300 mm in the central region. More than a half of the total rainfall is concentrated in summer, while precipitation in winter is less than 10 % of the annual total.

Koreans are one ethnic family and speak one language. The Korean alphabet is called Hangeul and is easy to learn and write which has greatly contributed to Korea's high literacy rate. They often understand written questionnaires better than verbal ones. Korean students start to learn English before junior high school.

Given the political differences between North and South Korea, this document will primarily focus on the execution of consumer tests in South Korea.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, Koreans are easy to approach and they respond positively to the interviewer. But Koreans are a little bit reluctant to express their opinions. Younger people, especially college students, are more assertive than older people. Even with young consumers, some effort may be necessary to encourage them to speak out at first. In a crowd, peer pressure will play a strong role forming and expressing opinions and people will very much go along with the crowd, or a person with a very strong opinion.

Koreans tend to avoid extreme scores on a scale. Nine is a lucky number and four is the opposite. Most of the time questionnaires can be self-administered. However, it would be best for the test administrator to verbally explain the instructions to the consumers who are too young or old, or who had never participated in consumer sensory testing previously.

¹ Ph.D., Professor, Dept. of Food Science and Technology, Ewha Womans University, Seoul 120-750, Republic of Korea

² Ph.D., Principal Research Scientist, Korea Food Research Institute, Rice Research Group, Backhyundong San 46-1, Bundang-Gu, Sungnam-si, Gyeonggi-do 463-746, Republic of Korea

³ Ph.D., Full time instructor, Dept. of Food and Nutrition, Seoul Women's University, 126 Gongneung 2-dong, Nowongu, Seoul 139-774, Republic of Korea

⁴ Ph.D., Givaudan Flavors Corporation, 1199 Edison Drive, Cincinnati, OH 45216

2. Days to Avoid Testing

The following are holidays.

New Year's Day	January 1
Lunar New Year's Day holidays	January 1 (Lunar calendar base) 3 days
Samil Independence Movement Day	March 1
Arbor Day	April 5
Children's Day	May 5
Buda's Birthday	April (Lunar calendar)
The Memorial Day	June 6
Constitution Day	July 17
Independence Day	August 15
Chuseok (Thanksgiving Day)	August 15 (Lunar calendar)
The National Foundation Day	October 3
Christmas	December 25

3. Times of the Day Most Appropriate for Testing

Testing may be carried out at any time of the day except the morning and evening rush hours. The recommended time of the day for conducting sensory testing is either between 10:00–11:30 a.m. or 2:00–4:00 p.m. and possibly avoid early morning, lunch, and evening hours. Lunchtime is between 12 to 1 p.m. People may be offended when inappropriately approached on the streets. Thus, experimenters are advised to use effective and inoffensive recruiting methods such as using flyers or the webmail system.

Testing with kids is normally done in school. Consent from the school principal is necessary. Churches are good places to conduct tests and are easy to get permission. Some university facilities may be hired to conduct consumer tests.

B. POPULATION PROFILE

1. Demographic Information

The total population of South Korea is estimated at about 48 million (2004). Almost 8 % of the total population is 65 years or older. Rapid urbanization of the nation has resulted in heavily populated metropolitan areas. In 2000, the population of South Korea was 45 985 000, divided into the following age groups: for 0–14 years, 21.0 % (male 5 087 000, female 4 551 000); for 15–64 years, 71.7 % (male 16 692 000, female 16 280 000) and for 65 years and over, 7.3 % (male 1 287 000, female 2 084 000) (<http://www.nso.go.kr>; Korean National Statistical Office).

2. Economic Classes

Social classes based on occupation of working-age population in 2004 are as follows: 20 % (4 515 000) for professional occupations; 14 % (3 177 000) for managerial and skilled occupations, nonmanual labor; 26 % (5 707 000) for service and sales; 7 % (1 451 000) for skilled occupations, manual labor; 33 % (7 156 000) for partly skilled and unskilled occupations. More information is available at <http://www.nso.go.kr> (Korean National Statistical Office).

3. Subcultures

South Koreans are one ethnic family and speak one language. However, within South Korea, there are cultural subgroups based on region, religion, and socio-economic status. Check with your South Korean consultants/researchers about the need, advantages, and disadvantages of including different socio-economic levels, religions, and other subgroups. Since almost one-quarter of the total population is concentrated in the capital (Seoul and suburbs of Seoul), most of the tests are generally conducted in the Seoul metropolitan area due to convenience. However, it is recommended to carry out testing in several regions for nationally targeted products since consumers living in different regions may vary in product preference. Confining the consumer survey to consumers living in Seoul may lead to the misrepresentation of the general consumers at the national level.

4. Literacy Information

Literacy is defined as the population age 15 and over who can read and write. The literacy rate in the Republic of Korea (2004) is 97.8 (male: 99.2 %, female: 96.4 %).

C. GOVERNMENT RELATED ISSUES

There are no known restrictions regarding conducting consumer tests in South Korea. However, South Korea Customs Service (KCS) is responsible for approving the import of all goods into the Republic of Korea and charging any tariffs. KCS determines import-related requirements, reviews declarations, and releases goods immediately when the import declaration is lawful. Customs declarations for import can be submitted under the name of a cargo owner, customs broker, or a juristic person for customs clearance.

More detailed information can be obtained from

South Korea Customs Service
920 Dunsan-dong, Seo-gu, Daejeon, Republic of Korea
Tel: 82 42 481 7688
E-mail: answer@customs.go.kr
Website: <http://www.customs.go.kr/eng/>

As in other countries, there are regulations on the import of various materials such as meat, plants, agricultural products, animal products, and medicines.

When processed foods are imported into the Republic of Korea, "Entry report for foods, etc." should be filed. Detailed procedures for importing foods can be obtained from the South Korea Food and Drug Administration.

Korea Food and Drug Administration
Food Safty Bureau,
Food Distribution Division
#5 Nokbun-dong, Eunpyung-gu, Seoul, Korea
E-mail: kfda@kfda.go.kr
Website: <http://www.kfda.go.kr>

All imported plant or plant products (unprocessed) are subject to quarantine inspection. Detailed information on importing plant or plant products can be obtained from the National Plant Quarantine Service.

National Plant Quarantine Service
433-1, Anyang 6 dong,
Manan-gu, Anyang-si, Kyungki-do,
Republic of Korea
Tel: 82 31 449 0521
Website: <http://www.npqs.go.kr/English>

When animal or animal products (unprocessed) are imported, they are subject to quarantine inspection. Detailed information on importing animal or animal products can be obtained from the National Veterinary Research & Quarantine Service.

National Veterinary Research & Quarantine Service
480, Anyang 6 dong,
Manan-gu, Anyang-si, Kyungki-do,
Republic of Korea
Tel: 82 31 467 1715
Website: <http://www.nvrqs.go.kr/extra/English/index.asp>

Materials such as samples and prototypes being used for testing shall be treated equally like other products for commercial use. Details of commodity codes (for example, HS code or The Harmonized Commodity Description and Coding System) may be obtained from South Korea Custom Services. Materials for academic research purposes shall be exempted from tariffs. Materials may be imported if declared as being of "no commercial use" and are under US\$60 in value (2005). Ministry of Commerce, Industry and Energy (web site: <http://www.mocie.go.kr/eng>) should be able to advise on this matter. The Trade Commission in Republic of Korea Embassies can provide advice on which department to contact regarding importing issues.

D. MEASUREMENT SYSTEM AND CURRENCY

The monetary unit is Won (W). See www.x-rates.com/calculation.html for currency conversion rate.

E. USE OF INTERNET IN CONSUMER TESTING

The Internet is used as one means of recruiting participants.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

There are a few courier/shipping agencies available. Your local contact agency will be able to provide detailed information.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Since the climate is not extreme, there are no special needs for storage of samples other than the normal refrigeration of perishables. Be aware of the South Korean hot and rainy summer months (especially June and July) and any possible effects on products. It is recommended to specify any special or critical product storage conditions. When renting facilities, make sure you have the proper storage equipment, e.g., refrigerator.

C. SELECTION OF TEST SITE/FACILITIES AND TEST DESIGN

Many consumer goods companies, including food and personal care product manufacturers, rely on consumer tests before launching their products. Considering the short life cycle and low profit for foods and beverage products specifically, as well as high competition among these companies, the tests are usually carried out confidentially using their own facilities in the Republic of Korea. Sometimes a portion of the test may be assigned to a small-sized marketing company. There are a number of agencies and institutions providing sensory services. For more information refer to the following websites: www.imrresearch.com and www.marketsdirectory.com.

However, testing may be carried out in most locations provided permission has been sought from the owner/lease holder of the test space. Many open spaces that seem to be public spaces are actually privately owned and permission will be required.

Local managers of premises should be able to advise whom to contact if they themselves cannot give permission for the use of the space. Local Authorities (Councils) own a significant portion of sites within towns and should be approached in these cases. They may also be able to refer researchers to the owners of potential sites for use.

D. RECRUITMENT OF PARTICIPANTS

1. Recruitment

Recruitment may be started by obtaining the profile of a community from the census records—Korea National Statistical Office (web site: <http://www.nso.go.kr/eng>, Tel: 82 42 481 4114, Government Complex Daejeon, 139 Seonsaro, Seo-gu, Daejeon). Depending on the design of the test, suitable recruiting methods (individual versus group) could be selected. The phone directory is frequently used for individual and group recruitment. Researchers may contact a few group representatives such as church, school, etc., for group recruitment. Participants may be recruited by a variety of means: telephone calls, advertisement in the press, or through the Internet.

Recently, advertisements using the Internet seem to be quite effective considering the popularity of computer networking in the country. Among the 15 million households in South Korea, 91.6 % of the households are equipped with telephone lines and 83.1 % of households had at least one mobile phone per household in 2002. The supply rate for computer and Internet literacy is quite high in South Korea considering that 60.1 % of the households own computers and only 5.6 % of the population do not know how to use the Internet among the computer users.

2. Contacting Participants

Participants may be contacted in a variety of ways: telephone calls (which is best if completed in the afternoon and not on weekends or evenings), on the streets, door-to-door recruitment, etc.

3. Who to Contact

Except for some ethnic and religious groups, any member of the family may be contacted. Minors (under 18 years) must be contacted through a parent or guardian.

4. Groups

Recruitment can be completed by contacting individuals or groups. For example, older participants might be recruited through elderly community centers. Children could be contacted through the principals of schools, managers of playgroups, etc. Schools for higher education and churches are other possibilities to recruit consumers.

5. Required Consents

Consents are required where children are the subjects, and they have to be obtained not only from the school but also from parents. For central location consumer tests, a license to conduct the test is not required by law. However, it is courteous to verify the need for a testing license with the local authorities in case there are any local by-laws.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The primary language is Korean and the literacy rate is high in South Korea. It is recommended that the ballots be written or translated into Korean. It is possible to conduct consumer tests using written English questionnaires with people with higher education. However, there is a risk of misinterpreting the English questionnaires. Dialects are spoken in some regions; however, questionnaires and verbal instructions can be given in standard Korean, and will be understood by all South Koreans.

B. QUESTIONNAIRE SCALES

1. General

People are generally familiar with scales and they can be easily used by consumers. It is advisable to give a brief and clear orientation prior to the test to ensure that the participants understand the task to perform.

Various types of category scales are used in consumer tests to obtain product liking and attribute intensities. Line scales are frequently used to evaluate the intensities of product attributes.

Examples of standard hedonic or intensity scales normally used in South Korea are illustrated below. Sensory professionals and consumer scientists recommend the use of 9-point or even 15-point hedonic scales for consumer hedonic measurements.

2. Scales to Avoid

South Koreans tend to avoid extreme scores on a scale. Nine is a lucky number and four is the opposite. Thus it is suggested to avoid using numbers to label the scales but to use category wording.

3. Recommended Scales

The following are examples of scales constructed in Korean.

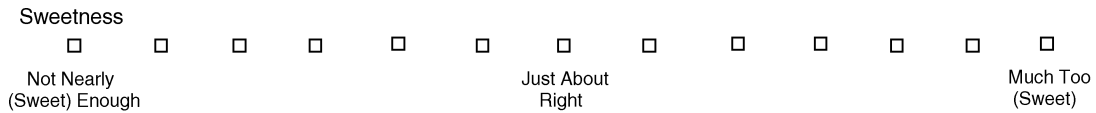
Example of 9-point hedonic scale

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dislike Extremely	Dislike Very Much	Dislike Moderately	Dislike Slightly	Neither Like/Dislike	Like Slightly	Like Moderately	Like Very Much	Like Extremely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
대단히 많이 싫어한다	많이 싫어한다	보통으로 싫어한다	약간 싫어한다	좋지도 싫지도 않다	약간 좋아한다	보통으로 좋아한다	많이 좋아한다	대단히 많이 좋아한다

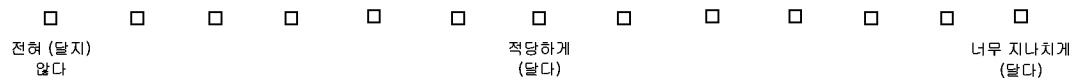
When constructing a Korean 9-point hedonic scale, the wording for each category can be directly translated into Korean. However, the direct translation of “extremely” to the corresponding Korean word should be avoided, since the word “extremely” is a radical expression that South Koreans generally tend to avoid. Thus the word “extreme” is normally translated to “대단히 많이” which means very very much in Korean.

Example of just about right scale

Sweetness



단맛



However, if the test administrator intends to modify the scales based on the specific purpose of the experiment, the wording of the scales should be carefully chosen to ensure a clear meaning. There are no special issues to be considered in adapting (constructing) a scale other than those considered in the standard sensory evaluation/consumer testing practices.

V. TEST ADMINISTRATION**A. LOGISTICS**

It is always a good idea to check the facilities where the consumer testing will be held in advance and plan on how the test should be set up based on the layout of the testing site. The procedures for sample preparation and serving should adhere to the standard sensory/consumer testing protocols.

B. TEST ADMINISTRATOR

The main test administrator who has been trained as a sensory professional or a consumer scientist is the most qualified person for administering the consumer tests. There are no specific issues or limitations on who can administer the test. Anyone who has training in running consumer taste tests can administer the test. Since technicians and other staff are also employed to assist in the execution of consumer tests, it is recommended that a trained sensory/consumer scientist trains and supervises the staff during the test.

C. PAYMENT/INCENTIVES

Various payment methods are acceptable to compensate South Korean consumers. Consumers generally receive gift certificates or free samples for their participation rather than cash.

VI. REFERENCES

Korean National Statistical Office, 2005, www.nso.go.kr. August.

Korean Overseas Information Service, 2005, www.korea.net. August.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **MEXICO**

Daniel L. Pedrero Fuehrer¹ and Carlos Iván Méndez Gallardo¹

I. INTRODUCTION

Mexican culture can't be individualized. Mexico is formed from several distinctive native settlers and "conquerors." Mexico has a very ancient history that has passed through bloody battles, socio-cultural-political, and religious impositions, and finally the amalgamating time factor has created a mixture of ethnic groups that live peacefully together. Mexican culture is attractive, basically because of its plurality in cuisine, exotic fruits, and resorts, ruins, the cheerfulness of its people, and its mysticism (reflected in its sorcerers, ancient temples, and herbal medicine). Of course, without forgetting the actual political transition after 72 years in power by one political party (Matte and Balderas 2003).

Mexicans have suffered for generations because of economical instability, extreme poverty, political corruption, and neglect to formal education. This has modeled a society of tremendous contrast: a small group of persons with extreme richness, great political power, and a high international education; a big mass of persons in extreme poverty, malnutrition, marginality, politically powerless, and with very little hope or interest for formal education. Between these two extremes a "middle" class has battled to survive, has been shut out from the rest of the world (until NAFTA and Internet opened a door!), has suffered the effect of paying high taxes for the rest of the Mexicans, and with time it has been diminishing in number because of the lack of evolution in the educational and economical systems (for example: credit is very expensive). But hope is not lost! Free trade agreements and political changes, greater experience on how to handle the "ups and downs" of the economy, a plural-powered congress, creation of new fountains of employment, and improvement of school professors' salaries, all in all it's generating a more stable atmosphere to live in.

These contrasts or extremes are also reflected in our productive-commercial system. For example, marketing research is relatively a new tool for Mexican politicians and small private companies, basically due to the fact that today Mexicans have been empowered through a much cleaner electoral process; the commercial free market is being highly diversified through introduction of foreign companies or importation of their products. This justifies that in the past 25 years, over 50 marketing research agencies serving the Mexican market have been integrated. It was only until 1992 that the Mexican Association of Marketing Research and Public Opinion Agencies (AMAI) was founded. A list of marketing agencies can be obtained from AMAI (2005) (www.amai.org).

Sensory science, on the other hand, has a shorter life span in Mexico, but yes, a very promising future. Some interest in sensory science started in the mid-70s when Rose Marie Pangborn came to Mexico with Herbert Stone to give a short course through the Mexican chapter of the IFT, the Mexican Association of Food Technologists (ATAM). Since then very little was done. Slowly thereafter, a handful of Rose Marie's students, back from U.C. Davis, started working locally, giving conferences and classes about sensory science and it's involvement in product development, marketing, and quality control (Coutiño 1994; Pedrero and Pangborn 1989). Currently there are several independent consultants in sensory science who are able to conduct consumer research studies for companies using their own or subcontracted facilities.

A handful of university and government-financed research centers have initiated sensory evaluation activities, supporting chemistry or food related faculties. An interesting review of the history of sensory science in Mexico was published in 1994 (Coutiño 1994).

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

Consumer research is mainly applied in urban surroundings, where people are easily accessible and classifiable in different socio-economic classes (AMAI 2005). This is contrasted with rural areas where

¹ *PentaSensorial, S.A. de C.V., Santa Catalina 313, Col. Del Valle, México, D.F. 03100*

consumer research is rarely applied, mainly because of a poor mass market infrastructure that make these areas economically unattractive.

Persons from urban areas are, in general, open to personal contact, accessible for questioning in open focus group sessions, or in spot-use tests. This attitude is more apparent in the higher and middle socio-economic class (SEC) persons; as you go to lower classes, persons tend to be ignorant, inexperienced, or undereducated, so they don't easily understand motives or the purposes of consumer interviews, or both. They have difficulty in expressing their experiences or observations with products, services, or market situations, if any.

Recent urban violence has built feelings of insecurity in Mexican people when contacted in public or for CLTs (Central Location Test). When setting up a place to perform consumer tests in central locations, it's important the interviewer can visibly show proper identification, so the consumers can feel assured they are dealing with professionals. It is common to perform these tests outside of supermarkets, subway stations, or in public parks, once the adequate authority permit has been granted, of course.

In general, Mexicans are very traditional persons, very aware of and are pleased to have their customs. This feeling permeates to the different ethnias in society; for instance, the Spanish, Arabic, or Jewish communities maintain their customs, although they do not reject the local/native typical culinary tastes. People of Mexican origin, as well as the rest of the ethnic groups (which are clearly a minority) in Mexico have been gradually accepting the "American way of life." Historically, Mexicans have used a very formal, respectful style of relating to one another. Business relationships are handled formally. In family or friendly relationships, within the same SEC, Mexicans are very open, cheerful, and warm persons. Between SECs Mexicans behave very respectfully, and are generally not racially discriminating, as is felt in other cultures. The differences in SECs can be difficult to deal with when conducting, for example, a group session, because the atmosphere can feel tense and no one participates.

Mexicans in general are very humble and simple persons, and they will not open up until they feel identified with someone, or safe, in a friendly environment. They will never open up as easily as persons from other cultures or countries do; this frank openness is sometimes seen as aggressive, shameful, or not polite. They will "give" when it is clear that others are giving. Mexicans don't ask for much. In group sessions, for example, they can be pleased with small tokens if they have achieved a friendly relationship with the moderator. It is important to be sure the person contacted or interviewed is not having a feeling of "being taken advantage of," because there will not be a correspondence of loyalty or honesty in his/her answers.

As a culture, Mexicans usually "look up" to foreigners—either Europeans or North Americans. So if middle-lower to lower SECs are being interviewed by "foreign looking" persons (fair skinned, blond or blue-eyed persons) you could not expect true objectivity in their answers. Because of cultural and educational exposure, this would not generally be the case when interviewing middle to higher SECs; on the contrary it's expected to be interviewed by their same SEC type of person.

In general, the urban Mexican society has been changing; the "macho" attitude or beliefs are losing importance. Women are being accepted more and more in a competitive business world. This process is accelerated due to the effect of low wages and economical crises. Of course, the change in thinking in the business world does not transcend to the home environment. Women are still expected to be in charge of or responsible for the household chores and are the primary caretaker of the children. Nevertheless, a natural consequence of women workers is that men are participating more in the house and child care responsibilities as well. Eventually the dynamics of the market purchasing decisions are being shared, not only by men and women, but also by their children (Matte and Balderas 2003).

Social activities in urban society are very important; these range from football, soccer, bar or discothèque gatherings, to "taco" dining or concert evenings. These activities will affect timing of sessions or date of interviews, especially on Social-Friday ("viernes social") evenings, local festive days, or "get away" weekends.

By nature, keeping track of scheduled hours is not a strength of the Mexican culture. A participant may sometimes run 15 to 30 minutes late when arriving at an appointment. Thus, at the end of a group session, if the atmosphere is cordial, you can expect the participants to linger on for a few moments more.

By its culture, lower class Mexicans are not too aware or don't mind poor sanitary handling conditions of foods. For example, during their lunch break, they like to "eat on the street," which means standing in front of a fast food improvised sidewalk outlet (1 by 2 metres) with no running water facilities. This type of custom may enable a participant in a consumer study to easily taste or try the test product

without having the least consideration of quality or sanitary safety. Despite this aspect, one should have ethics and apply sanitary measures when conducting food-related studies.

Food is a valuable asset to the Mexican society. If possible, food should not be wasted when a consumer test has finished. Mexico is a country where there are plentiful altruistic groups that would be happy to receive “unwanted” food for their needy. Consider this when excess or unneeded product remains at the conclusion of the study.

2. Days to Avoid Testing

Mexican customs circle strongly around Christian festivities, and it is recommended that tests not be scheduled close to the time of these festivities. For example, the day of the Virgin of Guadalupe (December 12), long walks (“peregrinación”) to her shrine are organized by hundreds of persons—mainly the working class.

During Holy Week (around March or April), the last two weeks of December and the first week of January, most urban middle and upper SEC “hit the beach.” It’s important to note that in December, about two weeks before Christmas, we celebrate the “posadas;” these were originally Christian parties celebrating the *preparation* for Christ’s birth. Today these two weeks of “posadas” are still a good pretext to organize parties or gatherings, either at home or at the office.

Important national (nonworking) holidays are February 5, March 21, May 1 and 5, September 15 and 16, November 20, and December 25.

Summer, seen as an off-school period, starts in late June and goes on to late August. We’ve had very good collaboration by school principals in order to allow us interviews with children to taste food products and promotions. After summer comes the rainy season (August and September), which is a difficult time to deal with, in order to schedule field work.

3. Times of the Day Most Appropriate for Testing

There are several things to take into consideration when assessing the format and timing of your research. The recommended time of day to perform consumer research is during mid-morning and mid-afternoon hours; the hours when children are in school. Be careful to avoid local eating hours, too (between 1:00 and 3:00 p.m.). Short intercept studies are appropriate to field over the weekend; however, focus group interviews should be scheduled during the week. Be aware of local holidays, as work and vacation schedules can affect the ease of panel recruitment. Avoid Holy Week (Christian festivity around March or April), the last two weeks of December and the first week of January; most Mexicans travel during this time. If you conduct research during this time and are targeting a particular regional consumer, you may not end up with a representative sample due to the increased influx of people on holiday.

B. POPULATION PROFILE

1. Demographic Information

The National Institute of Geography and Statistics (2005) is the official government agency in charge of performing a census of the nation. For detailed Mexican demographic information see the following website: www.inegi.gob.mx.

Mexico is a nation inhabited by 102 988 179 Mexicans (year 2001 projections, Pedrero and Pangborn 1989). It’s estimated that by the year 2025 Mexico will have 133 million inhabitants. The annual population growth has fallen in the past 20 years, from 3.3 % (1980) to 1.9 % in 2000 (INEGI 2005).¹

Mexico in 2002 had 20 642 606 homes, with an average of 5.1 persons per each home, and 1.7 persons of the members at home go to work.

In general aspects, income is distributed among the population in the following way:

¹ Formula to calculate Annual Population Growth (APG) in percent as given by INEGI (2005) is: $APG = 1/t * \ln(Pf/Pi) * 100$ where Pf=number of persons at the end of the period; Pi=number of persons at start of period; t=interval of time in years of the considered period; ln=natural logarithm.

Socioeconomic Level	Population (%)	Income Distribution (%)
High ("alto")	2.20	52.85
Middle ("medio")	18.33	30.10
Low ("bajo")	49.29	15.07
Popular ("popular")	30.18	1.99

The official criteria to consider a population as an urban or rural area is through estimating the concentration of their inhabitants. The parameters for this concentration are: a community is considered "rural" if the population density is less than 2500 inhabitants, "semi-urban" communities have a population density of 2500 to 49 999 inhabitants, and finally the "urban" communities have a population density of 50 000 inhabitants or more. Given these parameters, 67.5 % of the Mexican population live in urban areas (123 localities), 23.25 % of the population live in rural areas, and 9.20 % live in semi-urban areas.

Considering the population basis of 102 988 179 inhabitants in Mexico, the age pyramid is distributed in the following way (projected as of 2002):

Age (years)	Population %
0-4	11.16
5-9	11.76
10-14	11.25
15-19	10.47
20-24	9.45
25-29	8.51
30-34	7.45
35-39	6.65
40-44	5.45
45-49	4.27
50-54	3.56
55-59	2.70
60-64	2.32
65-69	1.79
70-74	1.22
75-79	0.88
80 or more	1.14

By sex the Mexican population is distributed as 49.10 % male and 50.90 % female.

Regarding religion, the majority (88.2 %) of Mexicans are Catholic and devoted to the Virgin of Guadalupe. Thus, for example, Holy Week and the four weeks prior to Christmas are full of tradition and religious activities.

The three major cities in Mexico are the capital or Federal District (called simply D.F.), Monterrey in Nuevo Leon State, and Guadalajara in the State of Jalisco. In general terms, and because of their population and economical importance, most of the marketing studies are performed in these cities.

2. Economic Classes

Marketing research agencies have in recent years become aware of profound economical, educational, and cultural differences among the Mexican population that have to be taken into account when selecting a sample of consumers. This, of course, was reflected in the early days, by the bias the overall results that the consumer tests rendered. These differences can now be explained by grouping or segmenting the population to be tested.

Most professional Mexican marketing research agencies follow the suggestions of the AMAI (2005) in order to group (segment) by classes the Mexican socio-economic strata (SEC). AMAI has devoted several years of detailed research and has come up with an in-depth questionnaire, called "Rule 6 by 4" with 48 closed questions, capable of classifying by segments the Mexican population in basically six different classes, also called "Levels:"

Level "A/B"	Contains the population with the highest life level and an income higher than \$48 000 (Mexican pesos) per month (data from 1999).
Level "C+"	Gathers the persons with a life level slightly superior to medium and an income that ranges from \$19 200 to \$48 000 (data from 1999).
Level "C"	Contains the persons with a middle life level or an income from \$6400 to \$19 200 (data from 1999).
Level "D+"	Considers the population of slightly lower life level than the middle, or it's also considered the lower level that is in better conditions (also called "Lower-High"); their income may range monthly from \$4000 to \$6400 (data from 1999).
Level "D"	Groups the persons with austere (severe) and low life level, with a monthly income range from \$1600 to \$4000 (data from 1999).
Level "E"	Also called "popular" level, groups the population that barely has life's basic needs satisfied. Its consumption of sumptuous satisfiers is nil; their quality of life is the worst because, for example, they don't have basic services such as bathrooms, water pipes, or sewage, etc.

Besides the data given above, AMAI complements the SECs with information about:

- Education profile of the family head
- House (as a building) profile
- Articles possessed (car, toaster, boiler, etc.)
- Services (bank, insurance, credit cards, etc.)
- Recreation and entertainment

AMAI can be visited at www.amai.org, and through it you can obtain a copy of the "6 by 4 rule" questionnaire.

Some market research agencies differ in their perception or interpretation of the SEC population distribution. It is recommended that you double check the screening criteria used to segment and recruit study participants, as well as if the interviewers were trained to apply the SEC questionnaire.

3. Subcultures

Mexico can be segmented into at least five geographical regions, which are represented by certain cities. These regions are differentiated by factors like climate, economical growth, population density, type of food consumed, history, pre-Hispanic culture, neighboring cities or countries, etc. The cities that represent important economical regions and concentrate the highest population are briefly described below:

- North-northwest: Tijuana, in the State of Baja California, is the city that harbors the biggest boarder traffic (with the U.S.) in the world. This, of course, triggers a very fast economical and population development. The city of Tijuana has 1.2 % of the population of Mexico.
- Northeast: Monterrey, in the State of Nuevo León, is a highly industrious modern city, very *avant gard*, and greatly influenced by the North American culture, because of its closeness to the U.S. border: The city of Monterrey has 1.1 % of the population of Mexico.
- Northwest: Guadalajara, in the State of Jalisco, conservative-traditional industrious city. The city of Guadalajara has 1.7 % of the population of Mexico.
- Center: Federal District (D.F.) is the capital of the Nation, overpopulated, big migration dynamics, highly polluted, industrious and commercial city. The Federal District (DF) has 8.8 %, and the State of Mexico (adjacent city intermixed by the urban mass) has 5.9 % of the population of Mexico. This urban mass almost reaches 20 million people!
- Southeast: Mérida, in the State of Yucatán, is the larger of the small cities in the Republic, very visited by European tourists (the rest of the Nation has more of the North American influence); the local population has historically, and still does, feel they are not a part of the country, they say they live in a world of their own, closer to Europe (mainly France and Germany) than to Mexico City. Mérida has 0.7 % of the population of Mexico.

Most market research is conducted in the five cities listed above. If research needs dictate specific characteristics of the population, contact local research agencies for help in pinpointing the location of the consumer profile needed. For example, Mexico City's population is "mixed;" in other words part of the working/studying population works/studies in the city and lives in the State of Mexico (located in the northern part of the city). It would be expected that consumer needs would be similar, but the profile and consumption patterns of the two types of consumers (living in the "north" and living in the "south" of the urban area) could be very distinctive! A way to balance out this effect would be to select your sample from the geographical areas that represent your target or is dictated by your research

objectives. Locally these geographical areas are limited by the government and differentiated by names and referred to as “colonies.”

In Mexico, as a nation, of the nearly 200 000 cities (or in general we should say “settlements”), only 21, the biggest of the country, concentrate 45 % of the population and capture 70 % of the market purchasing potential.

4. Literacy Information

It has been estimated that 92.4 % of the male population and 88.4 % of the female population of Mexico can read and write. Mexico’s population average school years are 8.7, but for High SEC its 15.67, Middle is 11.64, Low is 7.31 and for the Popular class it’s 5.48 years (projected as of 2002).

From the census of the year 2000, of the Mexican population that is older than 15 years (62.8 million persons), only 10 % (5.9 million) are considered illiterate. This percentage varies widely when you look at the “small picture.” In general terms illiteracy can be considered much lower for the urban areas and higher for the rural, low density areas.

C. GOVERNMENT RELATED ISSUES

In general terms, it’s not necessary to consult the Health Authority in order to run a consumer test. When performing consumer tests in a central location, it is recommended to request a permit to the organization (public or private) in charge of the location (mall, park, supermarket, etc.) where the test is to be performed. Consider in your time table the involvement to obtain these permits.

Whenever consumer research is intended to analyze foreign products, you will have to confront Mexican customs and the health authorities. Importation of food staples into Mexico has to pass Federal customs, and also has to gain approval from the Secretary of Health (“Secretaría de Salud,” SA, Dirección General de Salud Ambiental) and the Secretary of Agriculture (“Secretaría de Agricultura y Ganadería,” SAGAR). Therefore, it’s highly recommended you seek help of a local customs agent. For instance, messenger services like DHL and FedEx have local experience that can be of great help in the importation of your products.

For Mexican health authorities, importation of authorized food ingredients is the same as what is stipulated in the GRASS list of the FDA in the U.S. Check with your local international flavor company to determine if materials meet Food Grade specifications or requirements in Mexico.

In general, any animal or perishable product is very laborious to pass through Health customs agents; these products have to pass through a quarantine period of as much as two or three weeks. Build this delay into the scheduling of the research.

Be aware that there could be difficulties in the importation of competitive products. Mexican customs require that all imported products have a “certificate of origin.” This is very difficult to obtain from a competitor if you are not the product’s producer. If a product is to be used for research purposes only, product quantities will be restricted; quantities may not be sufficient for placement in consumer research studies. One way around these “problems” would be to repack the competitor’s product in your company’s container and declare it as your own production.

It’s highly recommended to contact a local customs agent for guidance on importing requirements, including legal guidelines and timing. Even with this advice, allow at least 50% more time to assure the best chance for a successful study start.

D. MEASUREMENT SYSTEM AND CURRENCY

For Mexico the typical measuring system is in metric units, although it’s not unusual to find many beverage industries using ounces for measuring bottle or drinking cup sizes.

The local currency is called “Peso.” For exchange rates consult: www.x-rates.com/calculator.html (2005).

Although many transactions are initially dealt with in U.S. dollars, the final invoices are usually handled in the local currency.

Throughout the country we have only one sales tax amount, which is 15 %. All foods, nonalcoholic beverages, and medicines are exempt from this tax.

E. USE OF INTERNET IN CONSUMER TESTING

Consumer research via Internet is recent in Mexico, probably since 1996; although it’s estimated by a few agencies that this research tool will soon be more popular. The number of Internet users in Mexico

is increasing considerably year after year. It's estimated that there are about 15 million Internet users, whose ages fluctuate between 13 and 65 years, of which 89 % are around 13 and 45 years old, are mainly of socio-economic level C and C- and use Internet at least three times a month. The main places of access to Internet are at home, the office and cyber-cafes (Mexican Internet Assoc. 2005).

Market research via Internet in Mexico is still seen by the local industry as being in its initial stages; mainly because the panel databases need to be identified, checked to be from reliable sources, and validated. This service is now seen as very expensive and with low credibility, but as agencies invest in the technological infrastructure, are selective in their databases, maintain them, and classify them, this service will be cheaper and trustworthy. The advent of multimedia cellular phones for sure will boost this research technique.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Mexico has been a "closed" country for many years, and just recently, with the Free Trade Agreements being signed, custom laws and importation taxes are rapidly changing. For market research tests, materials usually come in through Mexico City's airport. Alternatively, materials can be shipped in via sea. The important seaports are Veracruz (for the Gulf of Mexico) and Acapulco (for the Pacific Ocean). If materials are shipped via land, the cities of Tijuana, Baja California, or Nuevo Laredo, Tamaulipas, are good points of entry.

If shipping product by land, it's recommended that nationally known couriers (DHL, UPS, FedEx) be used. Shipments can be tracked when using these couriers. Local or international mail services are quite slow and undependable. Local transportation and storage facilities can be rented to hold/store and distribute the test products. Make sure that your market research agency representative is present to audit the site; this way product integrity can be properly maintained and better ensure the chances for a successful study.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

The climate in Mexico is very diverse; this needs to be taken into consideration when handling products that are affected by temperature and humidity. In the northern states, the climate is very hot and dry. In the coastal and southwestern areas (Caribbean shores, Gulf of Mexico and Pacific Ocean), there is high temperature and humidity (from 30 to 45°C, 85 to 100 % RH). In the central states (DF, Morelos, Puebla, Hidalgo, Querétaro, Jalisco), the climate is moderate throughout the year; temperatures range from 10–25°C. Consult your local market research agency to get recommendations on local storage sites for the test product.

C. SELECTION OF TEST SITE/FACILITIES

Due to the fact that most of the marketing research studies are performed in the cities of D.F., Monterrey, Guadalajara, Mérida, and Tijuana, local research agencies rent their own studios for focus group sessions. In these cities and smaller cities, without established marketing research facilities, it is usual practice to lease hotel saloons for two-hour focus group sessions or for short product tasting sessions (for example 10 to 30 minutes long).

Consumer tests are also performed in mobile units equipped to receive the consumer "on board." These units are easily parked in accessible areas in order to invite one or several consumers at one time to perform their test.

Central location sites like supermarkets, theaters, malls, clubs, schools, public markets, parks, and fair grounds, require the study originator to ask for permission to perform tests. The permit request has to be done in written form, specifying product(s) to test (a sample or photographs will increase credibility), dates requested for testing, number and name of persons to act as interviewers, and, if possible, the name of the company that manufactured the products or the local company that represents the foreign manufacturer.

As a study is planned, contact a local market research or sensory agency, or both, to solicit their input on facilities and their capabilities for fielding the study. This will ensure efficiency as they know the culture and customs more readily. A list of marketing agencies can be obtained from AMAI (2005).

D. RECRUITMENT OF PARTICIPANTS

In Mexico it's common practice for a research agency to directly recruit consumers or use the services of recruiters. Often these recruiters are women that have a part-time job or are self-employed. AMAI is doing great work to educate and professionalize these recruiters in order to have reliable suppliers of consumers.

Market research agencies advise that caution is needed when using professional recruiters for studies. Past history has shown that in some cases, professional recruiters have not been completely ethical when identifying the candidates for a study. Double check your screening criteria via a questionnaire or mini interview to assure that the participants recruited meet the requirements. Examples of things to watch out for are the following: past participation frequency, habits, and practices information. Don't hesitate to reject a consumer that doesn't fulfill the required profile! Remember the maxim: "garbage in-garbage out."

Most Mexican recruiters and research agencies have built a big enough database to perform phone contacts, either for focus group interviews, spot use tests, one-on-one interviews, or for phone surveys. A limitation of this database is that these persons are only representative of a small SEC (usually level "C" or higher); in Mexico only 1 out of 15 persons have a phone at home! To recruit study participants in other SECs, door-to-door contact or central location recruitment may be necessary.

Recruitment of children for consumer studies is most often easily done directly through school contacts. To do so, permission is first obtained from the school authorities; this grants permission to distribute a letter to the target children. The letter is intended for the parents, who should be informed about: (1) the purpose of inviting the child to participate in a consumer survey, (2) the location of the study (which could also be the school), (3) dates of test, type of product involved, and incentive for participating. If the parents are agreeable, this note will also obtain their written authorization so that the child can participate in the test.

There are no social or political taboos/restrictions for panelist recruitment. Companies can directly contact the desired individuals, if needed, but professional market research organizations may be of assistance when dealing with cultural norms in order to make the recruiting process more efficient when working toward a specific objective.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

Mexico's official language is Spanish. Among urban and above average educated or professional persons, English is the second language. In rural areas, native dialects are commonly spoken, with Spanish as the secondary language.

Because of the diversity in language or customs, it is recommended that researchers pilot questionnaires with a small group of target consumers. This will allow you to assess whether there is adequate comprehension of the questions and test procedures prior to running the larger study. Mexicans are eager to please an interviewer, regardless of whether they understand the question being asked, or not. Piloting the questionnaire will allow you to assess whether the participant is answering the question to just please you, versus answering the question when they fully understand the content.

Market research agencies in Mexico regularly have consumers participate in one-on-one interviews rather than filling out self-administered questionnaires, in order to best assure that the views of the study participant are fully captured on the questionnaire.

Most market research studies are performed in the larger Mexican cities where Spanish is the primary language. If testing is being done in multiple locations throughout Mexico, it is not usually a problem to standardize the questionnaires. If these questionnaires have been used in other Spanish-speaking countries, it is prudent to adapt, translate, and pilot questionnaires prior to placing the study

B. QUESTIONNAIRE SCALES

1. General

Consumers do not regularly use grading scales in their daily life, therefore it is highly recommended that, prior to the beginning of the study, the interviewer familiarizes the participant with the scale to be used. The interviewer should read out loud each interval of the scale structure. It is also recommended that the consumer be presented with a deck of cards with the different scales to be used (i.e., one card

per each type of scale). Each card in the deck is flipped over to visibly show the participant the scale being questioned by the interviewer at a specific moment. This way the consumer does not have to rely on his/her memory to choose the correct response; they can show or point out to the interviewer the response that has been chosen.

As in any other culture, the instructions should be clearly written to prevent the interviewer's own interpretation of the questionnaire for the respondent. The questionnaire and supporting document should include the product code (three-digit random number) and the order of the sample presentation.

When asking open-ended questions, instructions should include the caption "go deep" (*profundizar*) in order to alert the interviewer to probe the consumer to determine "if that is all he/she has to say."

The contracted Mexican marketing agencies should be fully briefed on the objectives and action standards of the project, so they can provide the adequate test questions to fulfill their client needs. Always double check everything to ensure that the test objectives will be met.

In general, it's recommended that test product codes be three-digit random numbers. Avoid letters or colors to code products. Products are tested blind (no brand name visible to the consumer), in most cases, but the objectives of the study will determine how products are labeled and presented to the respondents.

2. Scales to Avoid

The classic 9-point hedonic scale (i.e., from Peryam and Girardot 1952) is not the most frequently used scale to assess consumer liking by most Mexican market research agencies. A 10-point scale, like what is used at school, is commonly used. This scale ranges from 10-0, with only the ends anchored (from 10= "Like a lot" = "Gusta mucho," to 0= "Dislike a lot" = "Disgusta mucho"). It is important that at a minimum, the ends of a scale be anchored to prevent confusion from the respondents. When a nonanchored "like at school" 10-point scale is presented to naive respondents, the Mexican population may not differentiate between points on the scale; they may consider a grade of 5 or lower as the same grade (i.e., "a failing grade") or conversely, a grade of 6 or higher as a "passing grade." Interpretation of a scale such as this will not provide the researcher with a true assessment of the degree of liking of a product and therefore the data may lead them to make incorrect conclusions. It is highly recommended that each interval descriptor of the hedonic scale be presented (see below) and read out loud to the consumer; when working with a low education level sample, this is the only way that a researcher can be assured that the consumer understands the grading scale, thus providing an honest opinion about the way he/she likes the product.

3. Recommended Scales

The 9-point hedonic scale structure was adapted to Spanish, as proposed by Pedrero and Pangborn (1989), with the following terminology:

	English	Spanish
9	Like extremely	Gusta muchísimo
8	Like very much	Gusta mucho
7	Like moderately	Gusta moderadamente
6	Like slightly	Gusta poco
5	Neither like or dislike	Ni gusta ni disgusta
4	Dislike slightly	Disgusta poco
3	Dislike moderately	Disgusta moderadamente
2	Dislike very much	Disgusta mucho
1	Dislike extremely	Disgusta muchísimo

A typical just about right (JAR) scale in Spanish could read as follows:

	English	Spanish
1	Much stronger than what I like	Mucho más intenso de lo que me gusta
2	Stronger than what I like	Más intenso de lo que me gusta
3	With the strength that I like	Tal y como me gusta
4	Weaker than what I like	Menos intenso de lo que me gusta
5	Much weaker than what I like	Mucho menos intenso de los que me gusta

Other scales in Spanish are also suggested by other authors in this manual (Hough 2005).

V. TEST ADMINISTRATION

A. LOGISTICS

Focus group interviews, on average, run approximately 1.5 to 2 hours in length. Other interviews (one-on-ones and spot intercept tests) can vary in time depending upon the objectives and logistics of the study. It is highly recommended that the intercept tests last no longer than 15 minutes, since panelists have not been prerecruited and do not have a prior expectation of the time commitment involved. In special locations, like hotel saloons, the interview length can be longer. Prerecruited respondents will be aware of the time commitment expected from them and can make the appropriate arrangements for child care or other family commitments.

If a researcher plans to do testing in a professional work environment (rather than in a market research setting), be aware that respondents can become distracted. This distraction, trying to balance their job responsibilities and assisting with research studies, may cause them to lose focus, resulting in the interviewer's lack of patience with the respondent. If adequate pre-work is done so that the testing protocol is detailed and well understood, interviewers can be trained in techniques to help the respondent become more focused. This will eliminate many potential causes of error and result in more valuable feedback for the research team.

Detailed planning for a product test session is unfortunately not a big issue or a routine practice in many consumer studies. Most marketing agencies do not have a sensory science background, thus they are not aware of the details or care that should be considered in product handling protocols. Many details are overlooked or easily taken for granted. Therefore, it is recommended that the researcher reviews all procedures to be followed by the agency and ensures that the proper and controlled testing protocols will be followed. It's best to double check with both the supervisor and field worker or interviewer what is expected of them and of each step of their routine prior to the interview.

Due to the population density in most major metropolitan areas, Mexicans are used to long lines and long waiting times for many activities in their daily lives. It is highly motivating for consumers to participate in a research study where he/she feels like they are receiving full attention with little waiting. The consumer should not be left alone to wait or to ask for directions about the study. Due to the poor education level and low exposure, the Mexican consumer should receive a clear and concise explanation of expectations, procedures, and scales at the appropriate time in the research process.

Mexicans, in the middle and lower SECs are a culture that will not react or question if things are not clear to them. Thus, these people, in order to avoid these embarrassing situations, will unquestionably accept what is asked or given to them. So be careful, don't expect this type of consumer to express their perceptions or be highly critical about the quality of a product. With this in mind, the structure of questionnaires should be done considering Mexicans' (lower SEC) susceptibility not to freely or spontaneously answer a question.

Mexican market research agencies, in general, do not apply the same level of rigor as a sensory scientist in the handling of test products. Prior to running the research study, it is suggested that the researcher audit the storage and preparation areas at the test site and pilot the test procedures with all that will be involved with the study. If timing allows, the researcher should supervise the execution of (at least the beginning of) the study to assure logistics are handled appropriately.

Special considerations for sample serving follows:

- Interviewers instructions should be clear and pilot tested in order to avoid confusion or misunderstandings. Consider sanitary instructions too, like hand washing and clean work utensil and surfaces.
- Containers and utensils should be ordinary enough, or part of every day life (from the consumers SEC availability standard) to avoid nonspontaneous results. The simpler the better; the containers/utensils should not "look like" imported.
- Dress code—Interviewers should dress clean-casual, shirt tucked in and in light or pastel colors, with hair combed back, and clean, short fingernails.

Consumers, in general, should not be left alone to answer questionnaires, especially when dealing with children, teenagers, or middle and low class segments. In a saloon layout for a consumer study, consider leaving enough space between tables so the consumer doesn't have the chance to copy his/her neighbor's answers.

B. TEST ADMINISTRATOR

Consumer test field work in Mexico is usually performed by persons with minimum background (i.e., elementary school level or with a marketing research agency training). Thus the importance to

thoroughly train your personnel in order to truly rely on their work, remember that field work is where you gather your data and on which you will base your recommendations.

C. PAYMENT/INCENTIVES

Incentives for consumers attending a two-hour focus group session are dependent upon the panelist's SEC. Normally incentives are not given in cash, but in gift form; all group members receive the same gift. Please consider that these differences among SECs are a common practice to be expected by any agency, and are not a recommendation of the authors.

High ranking professionals (i.e., doctors, lawyers, directors, etc.) participating in group sessions are usually offered very good gifts for their time involved. Some agencies even perform their sessions in fancy restaurants and during evening hours, in order not to interfere with their busy schedules.

In general, incentives are given directly to the participants of the group session. For short "side walk" interviews (CLT), the consumer usually doesn't receive a gift, they receive a polite "thank you for participating" smile.

When testing with special groups of people, using organizations such as schools, it is customary to give a donation to the organization in addition to each participant. One example of this may be presenting each child with a lunch box and the school with a box of school supplies, a set of books for the library, or a "piñata" for the school fair.

VI. REFERENCES

- AMAI: Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública, 2005, URL: www.amai.org, Mexico City, June.
- Coutiño, V., 1994, Semblanza de la evaluación sensorial en Mexico. *Boletín Notitec-PUAL*. Vol. 4, Num. 3, 3-13. Programa Universitario de Alimentos, UNAM, Mexico.
- Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY, July.
- Hough, G., Mucci, A., and Findling, L. G., 2007, *International Consumer Product Testing Across Cultures and Countries: Argentina*, ASTM International, West Conshohocken, PA.
- Instituto Nacional de Geografía y Estadística (INEGI), 2005, URL: www.inegi.gob.mx, Mexico, June.
- Matte, J., and Balderas, E., 2003, Como ha cambiado la identidad del mexicano. Datos Diagnósticos Tendencias. *Bulletin of the Mexican Association of Marketing Research and Public Opinion Agencies (AMAI)*, Year 10, Number 36.
- Mexican Internet Association (Asociación Mexicana de Internet), 2004, Hábitos de los usuarios de internet en Mexico, 2004. URL: www.amipci.org.mx, Mexico, June 2005.
- Pedrero, D. F., and Pangborn, R. M., 1989, Evaluación sensorial de los alimentos. Métodos analíticos. Editorial Alhambra (Pearson Editorial), Mexico.
- Peryam, D. R., and Girardot, N. F. (1952). Advanced taste-test method. *Food Eng.*, 24, 58-61.
- Sigma Estudios de Mercado y Consultoría de Negocios, 2000, Mercados potenciales 2001, Alfredo López Altamirano, Ed.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **THE NETHERLANDS**

Dogan Yuksel¹

I. INTRODUCTION

The Netherlands is a Western European country between Belgium and Germany. Partly reclaimed from the waters of the North Sea, half of it lies at or below sea level (-7 m lowest point and 321 m highest point). Although the Netherlands' total area is relatively small, it is—with a population of almost 16 millions—one of the most densely populated countries in the world. The people of the world know that the Dutch people have generous and tolerant social qualities.

The Dutch consumers take only one hot meal a day, mainly in the evenings. The other two meals, breakfast and lunch, are sandwich meals. According to a survey conducted by a market research company (OP&P Product Research 2001) Dutch consumers like to eat the following food products using their national flavoring and quality understanding:

- Fresh dinner components (red or white meat, vegetables, and potatoes),
- All kinds of bread products,
- Fresh fruits and vegetables and canned vegetables,
- Dairy products including ice cream, cheese, fresh milk, and specialty milk products,
- Soft drinks,
- Cookies and desserts,
- Snacks, nuts, and nut products,
- Breakfast components, and
- Coffee, cocoa, and tea.

On the other hand, Dutch consumers like to experience new tastes and new food products when they are introduced to the market.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, openness is valued and Dutch culture allows for different preferences and opinions. It is appropriate to talk directly to participants of either gender or product end users, although parental consent must be obtained if children are to be used for a study (4–12 years old). In the Netherlands, the recycling program is very powerful and the recycle percentage for organic/food materials and others (e.g., disposable packaging material) reached 70 % in several pilot areas. The City Municipality's annual book for 2001 of the City of Wageningen (Informatiegids 2001) reports that the recycling program established a 57 % collection of the recyclable materials.

2. Days to Avoid Testing

Aside from religious holidays, testing should be avoided on New Year's Day (1 January), Queen's Day (30 April), National Liberation Day (5 May), Ascension Day (May or June; date varies), Good Friday and Easter Monday (March or April; dates vary), Whit Monday (May or June; date varies), Christmas Day and Boxing Day (25 and 26 December). In the Limburg Province Mardi Gras is officially celebrated (February or March; date varies). In most of the small towns the shops are closed all day on Sundays and until 1 p.m. on Mondays.

3. Times of the Day Most Appropriate for Testing

CLT testing and focus groups may be conducted until 8:30 p.m. at private locations. When considering shopping center testing, weekends are busiest and typical retail hours are 9 a.m.–6 p.m. on Saturday

¹ *Yuksel Consultancy, Sensory and Consumer Research, Experimental Design and Data Analysis, Gerdessastraat 33, Wageningen 6701 AE, The Netherlands*

and 12 noon–5 p.m. on Sunday. Supermarkets are allowed to trade until 8 p.m. every day. Some of the supermarkets continue to trade until 9 or 10 p.m.

B. POPULATION PROFILE

1. Demographic Information

The Netherlands has a population of 16 million people with a growth rate of 0.53 % (The World Factbook 2005). The largest population centers include Amsterdam, Rotterdam, The Hague, Utrecht, and Arnhem. Other major cities in the Netherlands include Nijmegen, Eindhoven, Groningen, Enschede, Apeldoorn, Leiden, and Haarlem.

Life expectancy at birth is 79 years, 82 years for women and 76 years for men. Ethnic groups include Dutch (91 %), Moroccans, Turks, and others (9 %). Religions include Roman Catholics (31 %), Protestants (21 %), Muslim (4.4 %), other (3.6 %), and unaffiliated (40 %).

Other demographic information:

- Approximately 18 % of the population is under age 15, 68 % is under age 65, and 14 % is age 65 and over.
- Total fertility rate is 1.66 child born per woman.

2. Economic Classes

The Netherlands is a prosperous and open economy depending heavily on foreign trade. The economy is characterized by moderate inflation, a sizable current account surplus, and an important role as a European transportation hub. Industrial activity is predominantly in food processing, chemical, petroleum refining, and electrical machinery. A highly mechanized agricultural sector employs no more than 4 % of the labor force but provides large surpluses for the food-processing industry and for exports. The Netherlands continues to be one of the leading European nations for attracting foreign direct investment. Economic growth slowed considerably in 2001–2004, as part of the global economic slowdown, but for the four years before that, annual growth averaged nearly 4 %, well above the EU average (The World Factbook 2005).

The economic classes are not visible in Dutch society. According to the Sector Statistical Analysis Department of the Netherlands (2000) the average income of those in the lowest income group (10 %) was 3300.00 Euros (EUR) per year and the average income of those in the highest group (10 %) was 66 400.00 EUR per year. The middle group (20 %) earned an average income between 19 310.00–23 400.00 per year (Personen Naar Inkomengroepen per kenmerk 2005). Other statistical information may be obtained at +31 45-570 70 70. The Internet page for this institution is www.cbs.nl.

3. Subcultures

The official language of the Netherlands is Dutch, which is spoken throughout the country. In the northern province of Friesland, however, a large percentage of the population speaks another Germanic language, Frisian, as its first language. Also, minorities such as Turks, Moroccans, Surinamese, and Indonesians speak their own language. In the Netherlands, the use of English is also widespread. Centuries of seafaring and cross-continental trade prompted the Dutch to learn foreign languages; it is a skill the Dutch still practice and enjoy.

4. Literacy Information

Ninety-nine percent of Dutch population aged 15 and older can read and write.

C. GOVERNMENT RELATED ISSUES

The Netherlands is a member of the European Union, so it follows the European regulations complemented with national regulations.

Foreign trade is under the Common European system. Economic and monetary policies are coordinated from Brussels.

Local or foreign agricultural offices of the Ministry of Agriculture, Nature Management and Fisheries operate, among others, as a liaison between Dutch exporters and interested parties abroad. The foreign agricultural service office of the Netherlands can be reached at this site: www.netherlands-embassy.org. A European Union Internet site named European Food Safety Authority will be helpful for further information (www.efsa.eu.int). In the European Union (EU) there are strict regulations for

GMO (Genetically Modified Organisms) products and irradiated foods. Only GMO corn, GMO soybean, and irradiated spices are allowed for import to EU countries.

D. MEASUREMENT SYSTEM AND CURRENCY

In the Netherlands the metric system is used as the measurement system. The Netherlands has accepted the Euro as their currency since January 2002. The currency conversion information could be obtained at www.x-rates.com/calculator.html.

E. USE OF INTERNET IN CONSUMER TESTING

In the past ten years a sharp increase in Internet use also helped the marketing companies and consumer research agencies. They could send the screeners as mass mails for recruitment and collect information from consumers, but the actual recruitment is still performed by phone in the Netherlands.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

A private courier service is recommended for product shipment. The time period for delivery is similar to other European countries.

Commercial goods do not need special government approval in the domestic market if they comply with general regulations. However, products coming from outside the European Union may have customs inspections. If there are any doubts about EU regulations, specific information may be obtained from the local Trade Information Center (www.kvk.nl).

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

The Netherlands has a temperate maritime climate common to much of northern and western European countries. The average January temperature is 2°C, and mean July temperature is 17°C. The average annual precipitation for the country is about 76 centimetres. Cloudless days are uncommon, as is prolonged frost. Because the Netherlands has few natural barriers, such as high mountains, the climate varies little from region to region.

Products should be stored appropriately to protect against severe weather. Couriers should be used for the transport of products with special temperature requirements.

C. SELECTION OF TEST SITE/FACILITIES

Local affiliates should be contacted for recommendations on test facilities. De Markt Onderzoek Associatie (The Market Research Association, MRA), is a Dutch body that offers guidelines for market research in the Netherlands. The Internet site of this association does not have an English version. Most of the members of this association also provide market research/sensory and consumer research services. It is recommended that the reader refer to the web site for specific information for test sites and facilities <http://www.marktonderzoekassociatie.nl> (Phone: +31-20-6235215). It is also recommended that the investigators contact officers of Vakgroep Sensorisch Onderzoek (Sensory Research Division) in the MRA for information on test sites and facilities.

It is recommended that most consumer tests should be performed in the Randstad area (includes the city of Amsterdam, Rotterdam, The Hague, and Utrecht) where it is the heaviest populated part of the country. Also, most of the minorities (Turks, Moroccans, Surinamese, and Indonesians) live in these four big cities. In Friesland, the city of Leeuwarden could be chosen if there is a specific research for this minority group.

D. RECRUITMENT OF PARTICIPANTS

Standard sampling methods and requirements should be adhered to. It is recommended that the test administrators employ a recruiting agency to obtain panelists. An alternative method of recruiting is to advertise in local newspapers.

If a random recruitment from a telephone database (not recommended) or an advertisement in local newspapers were chosen, it is possible to directly contact female heads of households. In the Netherlands most of the women either do not work for several years after having a child or they

decrease their working hours (they work 28 or 32 hours per week). In the Netherlands the official working week is 36 hours. Most companies or government institutions allow their employees to choose two free days per month if they work eight hours a day. Also, employees can make flexible arrangements for their workdays.

While it is acceptable to directly contact either adult males or adult females in the household to participate in a study, obtaining parental consent prior to approaching children, up to the age of 12 years, is recommended. Community organizations and schools can be approached for testing as well.

In the Netherlands it is also possible to recruit people and conduct the test in the shopping centers and during special events such as fairs, exhibitions, and shows.

E. OTHER DESIGN/PLANNING ISSUES

It is recommended that the test agency over recruit panelists by 20 %. Increased panelist incentive will better ensure commitment to the test.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

In the Netherlands the primary language is Dutch. English is also widely used, especially in most of the large cities.

Literacy in the minority groups is lower than in the Dutch group.

If the target consumer groups include minorities, especially Moroccan and Turkish workers, the questionnaire should also be in the Turkish or the Arabic language.

B. QUESTIONNAIRE SCALES

1. General Issues

Dutch, English, and related languages are read from left to right and horizontal scales are frequently used. Continuous scales are used and well understood. Hedonic scales are also frequently used among Dutch consumers. In Home Use Tests (HUT) the seven-point face scale is frequently used.

Also, three-, five-, and seven-point face scales are used for consumer research with children. Thumb-up and thumb-down instead of yes or no are used for acceptability tests when young children are the subjects.

Just-About-Right (JAR) scales are used to obtain diagnostic information and are combined with a 1–10 liking scale.

In general, Dutch consumers react moderately positive to products rather than negatively. Middle point ratings (5–7) are common for hedonic scales.

Three digits numbers are used for product coding and some numbers such as 000, 111, 747 are avoided.

2. Scales to Avoid

Vertical scales are not frequently used for Dutch consumers.

3. Recommended Scales

Continuous scales are used and they are anchored on both sides at 10 % and 90 % to avoid getting extreme low and high values. Five-, seven-, and nine-point scales are frequently used.

A typical hedonic scale in Dutch could read as follows:

	English	Dutch
9	Like extremely	heel erg aantrekkelijk
8	Like very much	erg aantrekkelijk
7	Like moderately	aantrekkelijk
6	Like slightly	enigszins aantrekkelijk
5	Neither like or dislike	noch/noch
4	Dislike slightly	enigszins onaantrekkelijk
3	Dislike moderately	onaantrekkelijk
2	Dislike very much	erg onaantrekkelijk
1	Dislike extremely	heel erg onaantrekkelijk

A typical just right scale in Dutch could read as follows:

	English	Dutch
1	Much stronger than what I like	veel sterker dan wat ik wil
2	Stronger than what I like	sterker dan wat ik wil
3	With the strength that I like	precies de sterkte die ik wil
4	Weaker than what I like	zwakker dan wat ik wil
5	Much weaker than what I like	veel zwakker dan wat ik wil

V. TEST ADMINISTRATION

A. LOGISTICS

In the Netherlands, most of the marketing companies and sensory and consumer research companies have regulations for consumer attendance. If consumers are 10 minutes late for their scheduled session they are dismissed from the test.

If males will be used for focus group discussions, they are typically scheduled after work hours. Females are scheduled any suitable time of the day.

In general, there are no special considerations for sample preparation and presentation. Recommendations are similar to those used in other western countries. The use of consent forms and ingredient statements is not common. Consumers assume that all products provided are edible and without odd ingredients, so normally it will not be necessary to explain composition (additives and ingredients) of the products to be evaluated. For any food allergy concerns such as nut and nut-product intolerance, or milk-sugar intolerance, the screeners will be used to identify these individuals.

B. TEST ADMINISTRATOR

The test administrator may be male or female in casual dress. The focus group moderator may wear business attire. There are no other special issues for the test administrator.

C. PAYMENT/INCENTIVES

The client/research company determines what compensation will be given to the participant. The most common incentive is monetary. Gift bags and certificates are also given. The incentive is usually received directly by the participant. In the case of children up to age 12, incentives are usually given to the parent or the guardian to be distributed to the child.

VI. REFERENCES

OP&P Product Research, 2001, "What vind Nederland lekker," (What is delicious in the Netherlands), URL: www.opp.nl, Utrecht, The Netherlands, October.

Informatiegids, 2001, *City of Life Sciences*, Gemeente Wageningen, Wegener Suurland BV, 120 pp.

The WorldFactbook: Netherlands, May 2005, Central Intelligence Agency (CIA), URL: www.odci.gov/cia/publications/factbook/geos/nl.html.

Personen Naar Inkomengroepen per kenmerk, June 2005, URL: www.cbs.nl, Centraal_Bureau voor Statistiek, Voorburg/Heerleen, the Netherlands.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **NEW ZEALAND AND AUSTRALIA**

Sheryl Cook¹ and Karen Stanton²

ACKNOWLEDGEMENT

The authors wish to thank the following individuals for their contributions during the development of this material. Their ideas, data, and support were of critical importance. Dr. Hester Cooper, 14 Long Bay Drive, Torbay, Auckland 1311 New Zealand; Lisa Duizer, School of Nutrition and Dietetics, Acadia University, Box 68, 12 University Ave., Wolfville, Nova Scotia, B4P 2R6; Jennifer Weller, General Manager, Hadar Homes, 99 Benalla Road, PO Box 186, Yarrawonga, Vic 3730, Australia.

We also appreciate the input from Kay McMath, Tracey Cummings, Rob Stevens, and Mona Fischer.

I. INTRODUCTION

Both New Zealand and Australia represent important markets in the Oceanic region, with a total population of approximately 24 million. New Zealand and Australia were both colonies of the British Empire and have many customs and traditions that originated in the UK.

Though New Zealanders and Australians are mainly of English decent, there are people from many parts of the world, primarily Pacific Islands, Asia, and Europe. Both countries have indigenous peoples: Maori in New Zealand and Aboriginal in Australia.

When conducting consumer testing in these countries, the test factors and setup are very similar to other western countries. It is most common for consumer testing to be conducted by market research companies or consultants in specialized booth facilities. Alternatively, tests can be conducted in halls or conference rooms and less commonly in shopping malls (assuming permission is granted). If you do not have the resources in these countries to conduct the consumer tests, there are a number of reputable market research companies that can be used to collect consumer data.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

Issues involved in conducting consumer tests in New Zealand and Australia are similar to the testing issues faced in western countries. Experience has shown that if consumers are not familiar with the product, they will be more likely to rate it lower than familiar products, and it is advisable to include product(s) which are currently available as benchmarks. Generally, when consumers discuss their reactions to a product a variety of opinions will be elicited. The majority of consumers do not "feel the need to please" as greatly as other cultures/countries (however, care does need to be taken when dealing with some ethnic groups within these countries). The tests used will depend on the experimental objectives, but in-home placement, CLTs, or focus groups can all be used. Results can be collected from any member of the household that fits the target consumer criteria, though parental consent is required for children under 14 years of age.

In both New Zealand and Australia all food products that enter must be microbiologically safe and free of foreign matter. There are limitations on some product categories and restrictions vary depending on the country of origin. Categories of particular concern are meat, dairy, bee products, fruit, and vegetable. Products in some of these categories are banned, particularly if the country of origin has a disease which is not in Australia or New Zealand, or both, e.g., foot and mouth. It is important to contact the appropriate regulatory authority to (a) determine if your product can be brought into the

¹ *Research Manager, Colmar Brunton, 80 Waterloo Road, North Ryde NSW 2113, Sydney, Australia*

² *Managing Director, Colmar Brunton Asia Pacific, 9 Tan Quee Lan Street, #2-05/06 Tan Quee Lan Suites Singapore, 188098*

country and (b) determine if the product can be taken into a public testing facility or must remain in a certified facility for testing and disposal. In New Zealand the body that looks after this is the Ministry of Agriculture and Forestry (MAF). The equivalent in Australia is the Australian Quarantine Inspection Service (AQIS).

2. Days to Avoid Testing

There are no special days, other than the obvious holidays, that should be avoided for consumer testing. Typically, late December and early January are not a good time to conduct testing as people tend to be on summer vacation. But if you can find the people, then you can test!

Public Holidays: Australia

1 January*	New Year's Day
26 January	Australia Day
Good Friday and Easter Monday (avoid Easter as a testing weekend)	
25 April	ANZAC Day
13 June	Queen's Birthday (except WA)
25 December	Christmas Day
26 December	Boxing Day

Each state will also have one or more additional public holidays each year.

* If any of these dates fall on a Saturday or Sunday, then the holiday is observed on the Monday.

Public Holidays: New Zealand

1 January*	New Year's Day
2 January*	Day after New Year
6 February	Waitangi Day (New Zealand Day)
Good Friday and Easter Monday (avoid Easter as a testing weekend)	
25 April	ANZAC Day
6 June	Queen's Birthday (except WA)
24 October	Labour Day (Last Monday in October)
25 December	Christmas Day
26 December	Boxing Day
27 December	Day after Boxing Day

Each province will also have a public holiday once a year.

* If any of these dates fall on a Saturday or Sunday, then the holiday is observed on the Monday.

3. Times of the Day Most Appropriate for Testing

There are very few times that people will not complete a consumer test. The typical working day starts between 8 and 9 a.m. and ends between 5 and 6 p.m. It all depends on the availability of the market segment that is being targeted. For example, if you require people who are working, you will need to ensure there are testing times available outside standard work hours on weekdays or Saturday and Sunday, or both. Typical meal times are: Breakfast 6–8 a.m., Lunch 12–1:30 p.m., Dinner 5:30–7 p.m.

B. POPULATION PROFILE

1a. Demographic Information: New Zealand

For the most up-to-date demographic information see New Zealand Department of Statistics: <http://www.statisticsnz.govt.nz>

New Zealand has a population of just over four million people. The capital of New Zealand is Wellington. Approximately two-thirds of New Zealander live in the North Island, and about one-third of the population lives in the more northern city of Auckland.

There are ~1.44 million households with an average of 2.6 persons per household (2005). Of these households

- 1.05 million households have families

- 407,000 couple families without child(ren) (couples who have not had children or couples whose children have left home)
- One in five households are likely to be one parent with child(ren)
- 333,000 one person households

New Zealand, and in particular Auckland, has many people with varied heritage. The first statistic following each of the ethnic group is the percent in New Zealand; the second figure is the percent of the ethnic group in Auckland. European/Pakeha (New Zealander of European decent) (~80 % versus ~69 %) New Zealand Maori (12 % versus 15 %), Pacific Islands (6 % versus 15 %), Asian (6 % versus 15 %).

Other demographic information:

Approximately 85 % of the population lives in urban areas, of which ~69 % live in “main urban areas,” i.e., areas with more than 30 000 people. Depending on the category/product/brand being evaluated there can be variations in consumer preference or reactions between these centers. However, for product testing, Auckland is the predominant city due to the large population base and the location of food companies.

The various cultures and races in New Zealand have different age structures. The Maori and Polynesian ethnic groups have approximately one-third more children than Pakeha/European families, under the age 15, and approximately two-thirds of their population is under 30. Of the European population, ~13 % are over 65 years of age.

The Pacific Island population is growing ~11 % faster than any of the other population groups.

New Zealand is a small country and has a population which is eager to adopt new trends and technologies (particularly in communication) and is often used as a test market.

The majority of New Zealanders can speak and read English. However, some ethnic groups are not fully fluent in English or would prefer to speak their native language. English and Maori are the two official languages of New Zealand, but Maori is not widely spoken.

If New Zealanders have a religious affiliation, it is likely to be Christianity based (Baptist, Catholic, Methodist, Presbyterian). If people are part of religious communities such as Seven Day Adventists, they will be unavailable for testing on Saturdays and alcohol is an inappropriate form of incentive. People who have immigrated to New Zealand may have retained the religious beliefs of their home country (e.g., Hindu, Moslem) and thus adhere to those practices.

1b. Demographic Information: Australia

For the most up-to-date demographic information see Australian Bureau of Statistics: <http://www.abs.gov.au>

Australia has a population of approximately 20 million people (2005) concentrated mainly in the Southeast, East, and Southwest coastal regions. Approximately 50 % of the continent is inhospitable and virtually uninhabitable with only 0.3 % of the population living in these areas. In contrast, 1 % of the continent contains 84 % of the population.

Australia is divided into six states and two territories: Tasmania (TAS), Australian Capital Territory (ACT), Western Australia (WA), Northern Territory (NT), Southern Australia (SA), Queensland (Qld), New South Wales (NSW), and Victoria (VIC). Together, NSW, VIC, and Qld are inhabited by approximately three-quarters (~15.5 million) of the population with the majority of the people living in the state capital cities of Sydney (NSW), Melbourne (VIC), and Brisbane (Qld). Other major cities are Adelaide (SA) and Perth (WA) with populations of a little more than 1 million each.

The population is split between

- Rural population approximately 13 %, and
- Urban population to 87 %.

There are ~75 million households with an average of 2.6 people per household. Of these households, 4.9 million are families of which:

- 2.3 million couple families with children (~47 %).
- 1.8 millions couple families without children (couples who have not had children or couples whose children have left home) (~35 %)
- ~760 000 one-parent families (~15 %)

Other demographic information:

The first people to inhabit Australia were the Aboriginal people. They now make up only ~1 % of the population. Australia has a highly diverse population. Migration to Australia is mainly from UK and Ireland, Asia and Europe. Of the current population 74 % were born in Australia and approximately one-quarter of the population migrated from other countries.

Approximately 20 % of the population is under 15 years old and 13 % is over age 65 (the usual retirement age). Australia has an aging population. Median age is 36.4 years old. Average weekly individual income is AU\$550 for females and AU\$840 for males.

There is no official religion in Australia but the religious affiliation of ~70 % of the population is Christianity. Also, the proportion of the population with no religious affiliation is approximately 25 %.

2. Socio-Economic Classes

Australians and New Zealanders have a record of being early adopters and heavy users of technologies such as computers, facsimile machines, mobile telephones, and electronic funds transfer.

Targeting of consumers in specific socio-economic levels (herein referred to as the SEL) is often one factor taken into consideration when recruiting consumers.

There is no formal caste system in either country and research agencies commonly use a combination of household type, income, and occupation to classify different groups of consumers.

Different organizations or companies may vary in their grouping of the socio-economic classes.

Determination of social class is generally made among adults, although it can be made among children if an adult is unavailable for interviewing. Determination of SELs to include in studies depends on the product or product category under investigation, the research objectives, and the target market. It is best to consult with your marketing or market research colleagues, affiliates in New Zealand or Australia, your research supplier or refer to <http://www.statisticsnz.govt.nz> or <http://www.abs.gov.au> when attempting to determine which SELs to include in a study.

3a. Climate of New Zealand

January and February are New Zealand's warmest months and July normally its coldest. The climate is temperate—averages range from 8°C in July to 17°C in January—but summer temperatures occasionally reach the 30s in many inland and eastern regions. The mean average rainfall varies widely—from less than 400 mm in Central Otago to over 12 000 mm in the Southern Alps.

For most of the North Island and the northern South Island the driest season is summer. However, for the west coast of the South Island and much of inland Canterbury, Otago, and Southland, winter is the driest season.

3b. Climate of Australia

The island continent of Australia features a wide range of climatic zones, from the tropical regions of the north, through to the arid expanses of the interior, to the temperate regions of the south. Seasonal fluctuations can be large, with temperatures ranging from above 50°C to well below zero.

Australia experiences many of nature's more extreme phenomena, particularly droughts, floods, tropical cyclones, severe storms, and bushfires. July is the month with the lowest average temperature in all parts of the continent. The months with the highest average temperature are January or February in the south and December in the north. Temperatures in Darwin, in tropical northern Australia, are relatively constant throughout the year. In other cities, there is a greater seasonal variation between summer and winter months. The seasonal variation is greater for the inland cities of Canberra and Alice Springs than it is for the coastal cities.

For further information refer to Australian Bureau of Statistics: <http://www.abs.gov.au>

4. Literacy Information

Sources vary on the information in regard to literacy, but all sources point towards a high literacy rate.

C. GOVERNMENT RELATED ISSUES

Both New Zealand and Australia are primarily agricultural producers. They rely heavily on agricultural (meat and dairy), horticultural, viticultural, fish, and dairy products for export earnings. To protect these exports strict compliance with government regulations is required to prevent outbreaks of contagious disease, unwanted pests, or organisms.

1. Specific Information for New Zealand

New Zealand has strict import/export regulations to protect and prevent the introduction of unwanted pests, diseases, and organisms into the country. The department of the government responsible for the importation of food products is the Ministry of Agriculture and Fisheries (MAF).

The MAF Biosecurity Authority and MAF Food Assurance Authority control the main government issues related to food/animal product importation. The import of foodstuffs is controlled by the Biosecurity Act, 1993. These authorities are New Zealand's protection at the border. Animal Biosecurity Import Health Standards are statements issued under Section 22 (1) of the Biosecurity Act 1993 by the Chief Veterinary Officer, MAF (acting under delegated authority), defining the conditions that must, if an import is to be made, be met in the country of origin of export, during transit, importation, and quarantine. There are numerous acts that state the requirements to be met for the importation of foods and products. There are standards and manuals that outline importation legislation. These standards relate to the importation of live animals and animal/food products. Further details of the MAF requirements to import can be obtained from the website:<http://www/maf.govt.nz>.

Further government issues can be accessed from the website: <http://www.govt.nz>.

Health certificates are required to show the product meets normal safety and hygiene requirements for food for human consumption. Standards recognized in NZ include ANSFA, CODEX, WHO, USDA, etc. Health certificates must accompany the shipment along with necessary permits to import. A copy of the required certificates should also be forwarded to the importer along with airway bill information to ensure customs is cleared efficiently at the port of entry (generally, Auckland). Depending on all the required information being available, products can be cleared through customs within a week to ten days. All costs associated with the importation, including testing, treatment, transport, and servicing are borne by the importer (and will be charged back to the client).

Essentially, all products of animal origin require an import permit if they are coming from a country known to have a history of contagious diseases such as foot and mouth. These countries are known as Category 2 countries.

Products that are imported from Category 2 countries can only be released for product testing at approved sites. Once evaluation is complete the remaining samples, residues, packing material, etc., are destroyed by incineration.

Countries known to be free of contagious disease, unwanted pests, or organisms need only provide an import health standard. This health certificate must be presented to MAF (Ministry of Agriculture and Forestry) Quarantine Service in order to obtain biosecurity clearance at the border.

Processed food (nonmeat) is not usually difficult to import; however, it is recommended that MAF still be contacted.

To be cleared at the border, products must also be commercially packed in original unopened packaging and the country of origin must be clearly stated on the packaging.

Approval to import is obtained via a permit from:

Import Management Section
Animal Biosecurity Group
Ministry of Agriculture and Fisheries
PO Box 2526
Wellington
NEW ZEALAND
Phone: +64 4 498 9625
Fax: +64 4 474 4132
E-mail: mulqueenk@maf.govt.nz

Another relevant and useful site is for the New Zealand Trade Development Board and can be found at: <http://www.tradenz.govt.nz/index.html> or <http://www.nzte.govt.nz/>. While this site is more relevant for importers from New Zealand, there are many useful links to information such as statistics, markets, and country profiles.

For testing which requires consumers to do other than taste the sample (e.g., determine allergy reactions to products, determine instrumentally the amount of force required to chew meat)—Ethics Committee approval must be sought. This is a complex process requiring research briefs to be peer reviewed before being signed off by Regional Ethics Committees (all of whom are bound by a national accreditation process). For further information contact: the Health Research Council of NZ see <http://www.hrc.govt.nz/>

2. Specific Information for Australia

Australia has very similar importing practices as New Zealand. The quarantine service there is Australian Quarantine Inspection Service (AQIS). While all products need to be declared to AQIS, the products most often taken into quarantine are processed meats and eggs.

As in New Zealand, if these types of products wish to be tested, companies must find a quarantine approved laboratory to conduct their testing in as all equipment and left over product must be autoclaved and disposed of in the correct procedures. Companies can not do in home testing with imported products that are quarantined.

For further information refer to the following websites:

<http://www.affa.gov.au>

<http://www.aqis.gov.au>

D. MEASUREMENT SYSTEM AND CURRENCY

Australia and New Zealand use the metric system.

Australia and New Zealand have their own currency. Both are referred to as dollars (\$) and cents (c).

For currency conversion, see <http://www.x-rates.com/calculator.html>.

E. USE OF INTERNET IN CONSUMER TESTING

Internet is popular for recruitment and consumer testing in Australia and New Zealand. Response times and response rates to Internet surveys are very good. Computer access is very high in both New Zealand and Australia, with a reasonable spread of middle and upper incomes and some lower income households. In New Zealand there tends to be a lower household penetration in Maori and Pacific Island households. For household penetration see <http://www.abs.gov.au> or <http://www.stats.govt.nz> or ask the recruitment company.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Most major airlines fly into both New Zealand and Australia. Airfreight is expensive (given the distances from most global markets) but extremely efficient.

Sea freight by comparison is slow but cheaper, with products taking up to six weeks to come from the U.S. or Europe. Storage and transport is then required from the port to the center of testing.

Nonperishable products can be couriered using all international courier companies, e.g., DHL, TNT, FedEx. The level of service is more dependent on that provided in the country of origin of the product than that obtained in New Zealand or Australia. Ensure that you check with courier companies that they will provide chilled/frozen storage door-to-door; not all couriers offer this service.

For perishable products, airfreight is the recommended method of transshipment. A freight forwarding company needs to be contracted in the country of origin. The freight forwarder will receive goods in NZ and Australia, clear customs, store the product in recommended storage conditions, and then notify the receiver. Delivery is then arranged to the appropriate physical address. The time taken to clear customs, etc., relies on the necessary documents being available and correctly completed. If these are as required, product can be cleared for delivery within two days of arrival in the country (however, one week is more typical). World Couriers are a company that profess to provide cool/frozen storage door-to-door.

Given the distance that products have to travel to reach NZ and Australia and the amount of handling that may be required during stopovers—it is essential that products are securely packed. Containers should be sturdy cartons with leakproof liners, preferably with polystyrene inners. Product should be in cartons or cans rather than flexible packaging which may tear during transshipment.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS: NEW ZEALAND AND AUSTRALIA

New Zealand consists of two main islands spread over latitudes of 40°S and 45°S. This brings a range of temperatures from the top of the North Island from an average of 18°C to 9°C at the bottom of the South Island.

Products designed to be chilled or frozen cannot rely on ambient temperatures to remain so.

Cool and frozen storage facilities in NZ are excellent and are monitored and regularly maintained through calibration, accreditation, and registration programs. Large cool stores which hold products for export (and can be used for imported products) will be registered through the MAF who require strict compliance to Product Safety Programmes.

Supermarkets, warehouses, and distribution outlets in New Zealand are also temperature controlled.

Due to the wide range of climatic conditions in Australia, it is best to check with carriers and receivers for the storage available in the area to be tested.

C. SELECTION OF TEST SITE/FACILITIES

In both New Zealand and Australia there is a selection of local and international market research companies who carry out product testing. For an up-to-date list of suppliers contact the Market Research Society of New Zealand (<http://www.mrsnz.org.nz>) or Australian Market & Social Research Society (AMSRS) (<http://www.amsrs.com.au>).

D. RECRUITMENT OF PARTICIPANTS

Door-to-door interviews are seldom conducted due to cost, introduction of Internet surveys, and people's lifestyles becoming busier and more mobile. Most major research agencies which recruit large numbers of consumers have relatively large databases. From these, they will screen suitable respondents to take part in central location tests (the most common method used for product testing and qualitative research).

Mall intercept as a recruitment method is not common. If your test requires a central location, contact a recruitment company to assist. See <http://www.mrsnz.org.nz> or <http://www.amsrs.com.au>.

Phone interviews are a highly efficient way of gaining consumer responses across a broad range of consumers from urban and provincial communities. There are regular telephone studies run by the major research agencies in both New Zealand and Australia if the researcher simply needs responses to one or two questions versus a questionnaire devoted solely to the product under scrutiny. Telecommunications are of a very high standard in both countries and the level of cell phone/mobile phone usage by individuals is also very high.

In New Zealand and Australia recruitment companies have panels of consumers who have agreed to be contacted by the company to participate in product testing. The market research societies in New Zealand and Australia have criteria about the frequency a respondent can participate in product testing, CLT quantitative and qualitative research. See <http://www.mrsnz.org.nz> or <http://www.amsrs.com.au> for further details.

It is acceptable to contact both males and females. While the female within a household is often the person contacted, many men have at least a contributing role in the grocery shopping and it is important to survey their opinions. Most research agencies have a database of children as well as adults. Parental consent must be obtained for children who are under 14 years of age and are to take part in research, even if parental support may well be needed to bring the child to the central location. If children are being approached through a school, the school will want to send out letters to each parent and gain parental approval before the research goes ahead. The recruitment agency will ensure that these areas are dealt with appropriately.

In some states of Australia, everyone (including researchers and preparation staff) who work with children in schools or other institutions, need to be police checked.

For central location product testing in New Zealand, the main city is Auckland as this is where over one-third of the population resides; it also has the greatest population cultural diversity and is where most food companies are based. The next main center for product testing is Christchurch. Phone interviews can be conducted to represent the entire country. Qualitative interviews can be carried out in main centers (Auckland, Wellington, Christchurch) and sometimes in provincial centers (Whangarei, Tauranga, New Plymouth, Hawkes Bay, Nelson, Timaru).

In Australia, the majority of central location product testing is in Sydney and Melbourne due to the majority of food companies being present in these two cities and the large population basis. Other capital cities are also suitable for testing, in decreasing population numbers they are Brisbane, Adelaide, Canberra, Perth, and Hobart.

To ensure the desired number of consumers, it is common practice to over recruit by approximately 10–35 % depending on what the category is and who the target consumers are.

E. OTHER DESIGN/PLANNING ISSUES

The majority of central location tests are carried out using self-completion questionnaires as opposed to one-on-one interviewing. Due to privacy laws respondents do not put their name on questionnaires and are open in their comments about products. Self-completion is also a more cost-effective method.

For in-home testing it is acceptable to instruct consumers to throw away food and packaging at the completion of the test. There is, however, an awareness of recycling and composting. This means that the consumers can dispose of the packaging, etc., in the most environmentally-friendly way.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

English is the main language in both Australia and New Zealand although some segments of the population speak Maori (New Zealand) and other Pacific Island, and Middle Eastern languages. Australia, because of its immigration policies since World II, has a number of immigrant populations who speak a variety of European languages. Both countries have an increasing number of Asian immigrants, particularly Chinese who only speak their native language.

The spelling of words tends to follow the British rather than American form.

Literacy rates are high in both countries and most exporting companies will be targeting higher socio-economic consumers among whom literacy should not be an issue.

In most instances, researchers will write questionnaires in English but should take into account some subtle semantic differences between the Northern Hemisphere and Australasia should they wish to use continuous word scales rather than line scales. This is important in word-anchored scales, both hedonic scales and attribute scales.

The differences lie in the language used to describe the negative end of the scale—the word “quite” equates to the word “slight” and the phrase “not at all” is not in common use, however, consumers do not seem to have too many problems when it is used. It should be noted that the word “quite” used in a hedonic scale, e.g., “Quite Like” indicates a very low level of liking in Australasia. It is considered a polite rejection of a product or concept. Also “Just right” can mean “great that’s perfect” or “it just meets the mark so it is just OK.”

B. QUESTIONNAIRE SCALES

1. General Issues

In general, issues relating to testing within these cultures are no different than testing in most English-speaking countries. Consumers respond to both verbal and written instructions. Most consumers would prefer to have the test procedure explained verbally; however, they will respond to written instructions as well.

If conductive group discussions and the aim of the research is to study consumer responses from the Maori or Pacific Island populations within New Zealand, it is recommended that a person who has experience with conducting groups with Maori or Pacific Island people, or both is used.

2. Scales to Avoid

There are no scales which need to be avoided when conducting consumer research in New Zealand or Australia; however, there are some semantic differences, see “scales to use.”

3. Recommended Scales

New Zealand and Australian consumers adapt reasonably easy to both line scales or word scales. The key is to ensure the instructions are easy to read and the scales are well anchored.

- 9 Like extremely
- 8 Like very much
- 7 Like moderately
- 6 Like slightly
- 5 Neither like or dislike
- 4 Dislike slightly
- 3 Dislike moderately
- 2 Dislike very much
- 1 Dislike extremely

A 5-point Just About Right scale might read as follows	In Australasia a more appropriate form of this scale might be:
Much too Sweet	Much too Sweet
Slightly too Sweet	Slightly too Sweet
Just About Right	Just About Right
Slightly not Sweet Enough	Not Quite Sweet Enough
Not at all Sweet Enough	Not at all Sweet Enough

V. TEST ADMINISTRATION

A. LOGISTICS

There are companies who can carry out recruitment or field research studies, or both. See Market Research Society of New Zealand (www.mrsnz.org.nz) or Australian Market & Social Research Society (AMSRS) (www.amsrs.com.au).

If you require your product testing to be conducted in booths, ensure you specify this, as some companies work out of halls and motel conference rooms. You can conduct your own research in public facilities such as motel conference rooms or community halls.

It is important to remember that New Zealand is a smaller country, and often the scale of operations for recruitment and conducting tests is smaller than Australia. If you are conducting a large test, you will often need to allow a slightly longer timeframe in New Zealand than Australia.

Consumers are typically punctual in attending tests. However, weather or traffic conditions can at times cause delays in consumers arriving. The local recruitment company or fieldwork company, or both, should be able to advise you of times that work well for obtaining the best response rates. Depending on the target consumer group, you will need to recruit more people than you require for the product test or interview. Discuss this with your recruitment company as it can range between 10–35 % over recruitment for product testing. For sensory testing, most market research companies will typically have session sizes of 15–25 consumers. For qualitative interview groups of six people, you will generally need to recruit eight people. If all eight people turn up, the general policy is to excuse the extra people and pay them the full amount had they stayed for the group.

Depending on the complexity of the test, it may be advisable to brief the consumers to ensure they understand the test format and what is required of them.

Fully brief the field company on your sample preparation and presentation requirements, including palate cleansers.

B. TEST ADMINISTRATOR

Test administrators vary widely in experience and expertise. You will need to match the skills of the administrator with the type of testing being conducted.

C. PAYMENT/INCENTIVES

In New Zealand, panelist incentives may be vouchers or cash depending on the research companies policy, while in Australia cash incentives are given. Products of an equivalent value, or products in combination with cash/voucher can also be given as incentive. Check with the recruitment company if this is helpful for the target group being recruited. Recommendations from a local agency regarding incentives are useful. The amount recommended will typically depend on the length of test time and

the amount of travel required by the test venue. Children are often given incentives of an equivalent to that of adults.

VI. MISCELLANEOUS

Business practices for inquiring about services and commissioning a project/services in Australia and New Zealand are similar to those in other western countries.

Without the individual efforts of the following sensory professionals in New Zealand and Australia, this document would have been even longer in its completion!

Sheryl Scott, New Zealand

Hester Cooper, New Zealand

Kay McMath, New Zealand

Lisa Duizer, New Zealand

Tracey Cummings, New Zealand

Rob Stevens, New Zealand

Mona Fischer, Australia

Karen Stanton, Australia

Jennifer Weller, Australia

Reviewer

Karen Stanton, Australia

VII. REFERENCES

Australian Bureau of Statistics, Canberra, Australia <http://www.abs.gov.au>

Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, Australia <http://www.affa.gov.au>

Australian Quarantine Inspection Services <http://www.aqis.gov.au>

Australian Market & Social Research Society, Sydney, NSW, Australia <http://www.amrs.com.au>

Currency Converter. 2005. URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY.

New Zealand Department of Statistics, Wellington, New Zealand <http://www.statisticsnz.govt.nz>

Market Research Society of New Zealand, Auckland, New Zealand <http://www.mrsnz.org.nz>

Ministry of Agriculture and Forestry, Wellington, New Zealand <http://www.maf.govt.nz/mafnet/>

New Zealand Government Online, Wellington, New Zealand <http://www.govt.nz>

New Zealand Trade Development Board, New Zealand <http://www.tradenz.govt.nz/index.html> or <http://www.nzte.govt.nz/>

Health Research Council of NZ, Auckland, New Zealand <http://www.hrc.govt.nz/>

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **PHILIPPINES**

Grace D. Brannan,¹ Maria Rita Salle,² and Cindy Ward³

I. INTRODUCTION

The Philippines is bounded on the east by the South China Sea and on the west by the Pacific Ocean. The archipelago is composed of approximately 7100 islands. The total area is 300 000 sq. km (298 170 sq. km land and 1830 sq. km water). The three main islands are Luzon, Visayas, and Mindanao. Luzon, the largest of the three islands, lies north and is home to Manila, the capital city, and the seat of government. The Visayan Islands are in the central region and are composed of Cebu, Bohol, Negros, Panay, Samar, and Leyte. The southern islands of Mindanao are the second largest and are composed of Camiguin, Basilan, and the Sulu Islands.

The Philippines has approximately 80 different dialects and languages. The national language is Pilipino based mainly on the Tagalog language. As such, the national language is referred to as Pilipino, Tagalog, or Filipino. English is widely spoken and is considered an official language. The eight major dialects or languages are: Tagalog, Cebuano, Ilocano, Hiligaynon or Ilonggo, Bicol, Waray, Pampango, and Pangasinense.

The climate from November to February is warm, balmy, and sunny with temperatures ranging from 20 to 28 °C (68 to 82 °F). March to May are the hot and dry months with temperatures ranging from 27 to 35 °C (81 to 95 °F). June to October are the monsoon months. Floods during the rainy months can pose some testing difficulty.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, when conducting a quantitative consumer test, there is a tendency for Filipinos to use less extreme scores on a scale. They use the middle scores more often and the negative portions of the scale less. They tend to avoid hurting feelings. This suggests that it is very important to stress the fact that their honest opinion is needed.

Younger people tend to be more vocal in their opinions.

Questionnaires are either self-administered or used with help from an interviewer depending on the economic level. Questionnaires are self-administered when participants belong to the higher economic levels A, B, and C. Questionnaires should be administered by an interviewer on a one-on-one interview when participants belong to economic levels D and E (see Section 2.2.2 for a description of economic classes).

In qualitative tests such as focus groups, participants are expressive and honest in their opinions. One situation to note is the tendency of some panelists to be too vocal and, therefore, there is the possibility for these people to dominate the discussion.

Safety issues due to political conflict may be a concern in certain areas of the Philippines. In the selection of central locations, the agencies normally coordinate with community (baranggay) officials. These officials would advise if the locations are safe. See also advisories from your country's Department of State.

¹ *Ph.D., Customized Sensory Services, 8834 Lavelle Road, Athens, OH 45701*

² *Sensory Science, Givaudan Singapore Pte. Limited, 1 Woodlands Avenue 8, Singapore, 738972*

³ *Ph.D., Givaudan Flavors Corporation, 1199 Edison Drive, Cincinnati, OH 45216*

2. Days to Avoid Testing

The following are public holidays in the Philippines:

New Year's Day	Jan. 1
Good Friday	the Friday before Easter
Araw ng Kagitingan	April 19
Labor Day	May 1
Independence Day	June 12
National Hero's Day	August 30
Bonifacio Day	November 30
Christmas Day	December 25
Rizal Day	December 31

It is important to note that if a holiday falls on a Sunday, it is the President's prerogative to declare the next day a holiday.

All Saints Day (November 1) and Christmas Eve (December 24) are not official holidays but are observed anyway. The majority of Filipinos are Catholics and, therefore, fast and abstain from meat on Ash Wednesday and Good Friday. Muslim Filipinos observe Ramadan and other Muslim religious holidays. Major festivals like Fiestas (normally in May) and Ati-Atihan, Sinulog, Dinagyang (in January) are very much celebrated in the Philippines. Except for Christmas, Easter, and All Saints Day, the agencies find it easier and more convenient to conduct CLT on public holidays because respondents may be more available on these days. Note that the test location should be near to where the people are to get a high level of participation.

3. Times of the Day Most Appropriate for Testing

For working women and men, after office hours (work hours are 8 a.m.–5 p.m.) are appropriate for conducting tests. Nonworking women are available and generally very helpful in the afternoon after lunch. Mornings are normally devoted to housework. Nonworking men are available anytime and interception is a very effective form of recruitment.

Tests with children are normally done in school. Consent from the school principal is necessary and normally easy to obtain. This is to make sure that the products are safe. When testing on the school premises, consent is not necessary from parents. However, when there is a known allergen in the product, consent from parents is necessary. If there are allergens in the product (i.e., shrimp powder, etc.), the agencies are instructed to include this question in the screening.

Lunchtime is between 12:00 noon and 1:00 p.m. Dinnertime varies by household but is normally between 6:00 and 8:00 p.m.

Most private businesses are open Monday through Saturday, from 8:00 a.m. to 5:00 p.m. Government offices are open Monday through Friday. Most colleges have Saturday classes. When conducting CLT, it is highly recommended that the experimenter brings the products to a venue close to the people rather than ask them to come to a more remote venue. By doing so the issue related to traffic conditions is avoided. Community halls called "barangay hall" can be rented. Filipinos tend to be more trusting when they are familiar with their surroundings. Participation is also high if the venue is close to where they live. It is important to stress that the experimenter should make sure that the venue meets the guidelines for conducting a controlled test.

B. POPULATION PROFILE

1. Demographic Information

The Philippine population of 84.5 million (mid-2002 census) is divided into the following age structures: (1) 0–14 years: 36.6 % (male 15 731 451; female 15 169 264); (2) 15–64 years: 59.7 % (male 24 990 500; female 25 478 245), and (3) 65 years and over: 3.7 % (male 1 399 862; female 1 756 317). The population is estimated to grow at 1.99 %. The ethnicity is broken down as follows: Christian Malay 91.5 %, Muslim Malay 4 %, Chinese 1.5 %, other 3 %. The population is 83 % Roman Catholic, 9 % Protestant, and 5 % Muslim.

2. Economic Classes

The population is divided into the following economic classes: AB, Upper C, Broad C, D, and E. The classes were determined based on income, personal property, location and quality of home, education, and occupation of head of household. Note that because the percentage of Class A in the Philippines is

very small, it is usually lumped with B. Rarely do market researchers use A separately from B. Moreover, it is very difficult to get panelists from this economic class (MORES-see References).

3. Subcultures

The Philippines has a multi-cultural and multi-ethnic population. Check with your local consultant about possible influence of diversity on marketing or sensory research. Most tests are generally conducted in Manila although tests are also done in the Visayas, Cebu in particular, which is a big, affluent city. The Visayas is the area where soft launching and test marketing of consumer products are typically done. Other possible test areas are Iloilo and Mindanao although safety may be a concern in Mindanao. Consult with your local research agency about the security situation. When testing in areas other than Manila, keep in mind that dialects other than Tagalog are used. For nationwide surveys, Metro Manila, Cebu, Davao, and Laoag are the target locations.

4. Literacy Information

Literacy is defined as the population age 15 and over who can read and write. The literacy rate in the Philippines is 94.6 % for both males and females.

C. GOVERNMENT RELATED ISSUES

There are no known restrictions on consumer tests in the Philippines. However, if products for consumer testing will be sent in bulk, the Bureau of Customs may require the receiving company to present their license to import. Additional requirements may include a health certificate as well as laboratory analysis from the Bureau of Food and Drugs. Customs delays may occur if food products are required to be sent to the Bureau of Food and Drugs for analysis unless there is certification that these are samples for laboratory use only. This is frequently encountered when the volume is large or for dairy and meat products. Contact information for both agencies is listed below:

Bureau of Customs
 Port Area, Manila, Philippines
 Tel: 63 2 527 4602
 Fax: 63 2 527 1953

Bureau of Food and Drug
 Alabang—Zapote Road,
 Muntinlupa, Metro Manila
 Tel: 63 2 842 84 29

D. MEASUREMENT SYSTEM AND CURRENCY

The Philippine currency is the peso. A peso is equivalent to 100 centavos. In the Philippines, both metric and English systems are used. Make sure test or preparation instructions are in proper units.

E. USE OF INTERNET IN CONSUMER TESTING

Internet users in the Philippines totaled 2 million in 2001. To date, however, it is not utilized in consumer testing.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

There are a few courier/shipping agencies available. One site that provides a transport and shipping directory is: <http://lunar.webphilippines.com/portcalls/shplines.php>.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Weather in the Philippines is very humid. Specify storage conditions particularly if critical to the product. Bonded warehouses are at ambient temperature and without any humidity control. Temperature- and humidity-controlled warehouse/van can be arranged as per client instructions during shipping and storage for an additional fee. When renting facilities, make sure you have the proper storage (e.g., refrigerator) and preparation equipment.

C. SELECTION OF TEST SITE/FACILITIES

Major food and beverage manufacturers rely heavily on consumer tests before launching their products. There are several top market research agencies in the Philippines offering services such as advertising research, focus group discussion, and consumer studies to name a few. The client can either provide the test design or ask the agencies to design the test for them, based on their objectives. One organization that will have information on market research agencies in the Philippines is International Market Research Information (www.imriresearch.com).

D. RECRUITMENT OF PARTICIPANTS

To recruit panelists for a focus group, calling by phone is a very effective means. There were 3.1 million telephone lines in use in the year 2000. In the same year, mobile cellular phones were used by 6.5 million. Recruiting panelists for focus groups by going from house to house is also practiced. For a central location test (CLT), an experimenter normally will start by obtaining the profile of a community from the census records of the National Statistics Office (NSO) (contact info: National Statistics Office: Ramon Magsaysay Blvd., Quezon City Tel: 63 2 716 0807/0734). Market research agencies, as common practice, would have a listing of baranggays (communities) classified according to socio-economic class. Inspection of central locations to check if requirements are met is normally done before the final selection of the location. The experimenter will then conduct a house-to-house recruitment, usually skipping several houses in between potential panelists.

For the Central Location Test (CLT) the specific respondent selection is done via area sampling. This is a multi-stage sampling procedure where the areas are randomly selected. For example, if the CLT will be done in Metro Manila, the market research agency will use a map of the metro and divide it into blocks. Metro Manila becomes the primary sampling unit, the cities become the secondary sampling unit, the baranggays the tertiary unit, then the streets, then finally the households. Each of the sampling units has a corresponding numbered map and once they have randomly selected the areas where recruitment will be done, they use the map to help them locate the households. Before the households are selected, the selected streets are identified. They randomly select a starting point in the streets, and through a skipping pattern (systematic sampling) select every *k*th household in that street. *K* is based on how many interviews they are allocated for that particular area. To summarize:

1. Map of Metro Manila (or any big cities chosen for the test) divided into blocks (cities) which are then numbered. Another way is to divide Metro Manila into East, South, West and North.
2. Selection of the cities (random selection).
3. Selection of the baranggays (random selection).
4. Selection of the streets (random selection).
5. Selection of the households (systematic sampling).

There are instances when the agency needs to go to the areas to draw maps if this is not yet available. By mapping it means they draw the streets, how the households are located, where the boundaries are.

For nationwide surveys, the country is divided into provinces, then big cities and capitals, then households. More commonly, the major cities of Metro Manila, Cebu, Davao, and Laoag are used. Unlike in other Asian countries where there are very distinct cultural subgroups, if there is a need to compare populations in the Philippines, provinces are compared instead of ethnicities.

In combination with area sampling, a percentage (%) of users and nonusers of a specific product may be selected as respondents.

For Focus Group testing recruiting is done similar to CLT. Panelists are screened based on test specifications.

For the Home Use Test recruiting is similar to CLT and Focus Group. Depending on the customer's requirements, the agency may do a variation of area sampling called cluster sampling.

The agencies may also have databases of consumers. Recruitment through telephone calls is less used than personal recruitment.

For tests with children the common practice is to get mothers with children of a specified age. The mothers and children can then be panelists. If only children are needed, then parental consent is sought. If testing is done in the schools, the school principal's consent is sufficient.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

Literacy is high in the Philippines. However, with the existence of multiple dialects/languages it is very important to check if translation is necessary. The marketing/consumer test agency normally translates the questionnaire and asks the client to approve. Back translate to make sure the questionnaire captures all the essential information.

Questionnaires are not necessarily translated all the time. If the target panelists belong to Class D and E, it may be necessary to translate them into the local dialect. For A, B and C, an English questionnaire may be satisfactory.

B. QUESTIONNAIRE SCALES

1. General

The 7-point hedonic scale (1 = dislike very much, 7 = like very much) is very common and familiar to Filipino consumer test participants. The 9-point hedonic scale and ranking are also very common and familiar.

(a) Hedonic

The following is a Tagalog translation for the 7-point and 9-point hedonic scales.

7-Point Scale

Like very much	Gustong-gusto
Like moderately	Medyo gusto
Like slightly	Gusto ng kaunti
Neither like nor dislike	Hindi masabi kung gusto o hindi
Dislike slightly	Hindi gusto ng kaunti
Dislike moderately	Medyo hindi gusto
Dislike very much	Hindi gusto

9-Point Scale

Like extremely	Talagang gustong-gusto
Like very much	Gustong-gusto
Like moderately	Medyo gusto
Like slightly	Gusto ng kaunti
Neither like nor dislike	Hindi masabi kung gusto o hindi
Dislike slightly	Hindi gusto ng kaunti
Dislike moderately	Medyo hindi gusto
Dislike very much	Hindi gusto
Dislike extremely	Talagang hindi gusto

(b) JAR Scales

7-Point JAR Scale

Much too weak	Talagang masyadong mahina
Too weak	Masyadong mahina
Slightly too weak	Medyo mahina
Just right	Tama lang
Slightly too strong	Medyo matapang or medyo malakas
Too strong	Masyadong matapang or masyadong malakas
Much too strong	Talagang masyadong matapang or Talagang masyadong malakas

5-Point Scale

Too weak	Masyadong mahina
Slightly too weak	Medyo mahina
Just right	Tama lang
Slightly too strong	Medyo malakas or medyo matapang
Too strong	Masyadong malakas or masyadong matapang

2. Scales to Avoid

The effectiveness of picture scales with children is inconclusive. Experience suggests that children's verbal choices do not necessarily match with the pictures. They tend to avoid the negative facial expressions because they do not like the sad faces. More study is needed to confirm this observation.

3. Recommended Scales

The 7- and 9-point hedonic scale and ranking are very common and useful. As for which scale to use, it depends on the requirements of the client. However, in general, the 7- and 5-point scales are more widely used compared to the 9-point scale. This is because, the 7- and 5-point scales can have distinct categories when translated in tagalog, whereas the extremes of the 9-point scale is harder to translate and may not have a significant difference from like very much and dislike very much.

Show cards are often used where the dislike/like terms shown above are written but no line scale is shown or used. A show card is a visual aid for the panelists. The list of products or the scale terms are reproduced or printed on a piece of paper in large font. This is shown to the panelist when asking them to choose the rating for an attribute or when asking them to identify the brands they use. It is very useful for one-on-one interviews.

V. TEST ADMINISTRATION

A. LOGISTICS

Always visit onsite to check facility or if not, ask for the floor plan of the testing facility and the appliances, furniture, and gadgets available. Obtain detailed information about storage capability. The potability of tap water is questionable except in upscale hotels and restaurants. Purified bottled water is available and is recommended for sample preparation and for rinsing during the test.

B. TEST ADMINISTRATOR

Once interviewers are trained, they are very reliable. A practice session is always recommended. Interviewers follow test instructions and procedures faithfully. However, it has been observed that there are interviewers who tend to deviate from the instructions when they are trying to make the panelist understand the instructions. This happens rarely and is unintentional. Having at least one field supervisor in every test location helps avoid this situation. Explanation of the objective of the test, the critical points and procedure, and why it is important to stick to the script also must be emphasized during the briefing. This situation with interviewers is harder to control in home placement tests so extra precautions to prevent this should be taken.

C. PAYMENT/INCENTIVES

The Marketing and Opinion Research Society of the Philippines, Inc. (MORES) recommend tokens instead of cash as panelist payment especially when dealing with children. This is an organization of market research practitioners and membership is not compulsory. Companies conducting consumer tests do not have to go through them.

Some agencies may pay in cash but the common practice is to give small gifts or toys instead. The main reason is to discourage the practice of participating in consumer tests as a means of earning. If paid in cash, panelists may also inform neighbors and relatives and people may rush over to the central location.

Payment to marketing/consumer test agency is by check. It is common to pay 50 % down upon approval of proposal and 50 % upon delivery of results.

VI. REFERENCES AND BIBLIOGRAPHY

Atlapedia. <http://www.atlapedia.com/online/countries/philipp.htm>, Latimer Clarke Corporation Pty Ltd., Australia.

Central Intelligence Agency, 2002, *The World Factbook*, Office of Public Affairs, Washington, D.C., USA.

Department of Trade and Industry, Industry and Investments Bldg. 385 Sen. Gil Puyat Ave., Makati City, Philippines. E-mail: mis@dti.dti.gov.ph.

Marketing and Opinion Research Society of the Philippines, Inc., (MORES).
www.mores.com.ph: Unit 42, Martino Building, 52 Libertad corner Kanlaon Streets,
Mandaluyong City Tel: 63 2 533 66 53 mores@i-manila.com.ph

Roberto, N., January 2002, *The Marketer's Guide to Socio-Economic Classification of Consumers*,
Philippines, 111 pp.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **POLAND**

Jagoda Mazur,¹ Henryka Komanska,² and Malgorzata Jablonska²

I. INTRODUCTION

Marketing and product research are new phenomena in Poland. Until 1990, the country had a centrally planned economy and there were few choices in each category of consumable goods. The change in the economic and political system spurred fast economic growth. Many multi-national companies moved quickly into the Polish market. Polish consumers enjoy a living standard among the highest of the former Eastern-block countries. On May 1, 2004, Poland joined the EU and became part of the EU common market. Prior to the accession, Poland had to implement all necessary political, judiciary, and economical reforms to be able to cope with market forces within the Union.

Polish consumers have many similarities to those in the market economies, but there are some cultural differences that may affect research results. For example, many older Poles (55+) have not adapted to the new language of the market and may not be reliable respondents. The response rates to self-administered questionnaires have been rising; however, face-to-face contact is more effective.

Marketing research is well developed in Poland. Most of the major western market research firms have offices in Poland (especially in Warsaw, the country capital). Many independent local market research firms also exist.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

Poland was one of the former Eastern-block countries that made a successful transition into the market economy. In the mid to late 90s, Poland experienced a substantial economic growth and the consumer culture began to take hold. In the 90s, the attitudes and responses of the Polish consumers, especially those over 30, were affected by the memory of the communist times and, especially, of the “deficient” economy. This economy was characterized by the persistent lack of consumer goods, and extremely limited choice within a product category (it was difficult to even talk about “choice of brands” as there were practically no brands). This memory and the desire not to offend the interviewers made Polish consumers react positively to products. The wider the offer, the better it was, no matter whether they would really buy the product. As a result, ratings were unrealistically high and only top box purchase intent scores were considered in concept and product testing. The slowing economy of the 2000s as well as an increasing sophistication of Polish consumers affect their attitudes towards consumption, as reflected in consumer tests (e.g., purchase intent scores are no longer as high as they used to be).

In qualitative research, respondents do not have problems with expressing negative attitudes. There are, however, regional differences: respondents in large cities are more willing to express their genuine feelings towards products tested than those in smaller towns or rural areas. As in many other countries, groups tend to be more critical than individuals.

As in Western Europe, females are interviewed predominantly as they are the primary shoppers. As the Polish consumers are still very interested in market research, the response rates are relatively high. However, in large cities, especially Warsaw, the response rates are starting to fall as consumers overcome their first fascination with market research and product testing. Nevertheless, product testing can be done quite easily due to consumers’ high willingness to try new products. In the case of home use tests, the consumers generally accept that the unused product will be collected from them. In some cases, it is helpful to allow the respondents to keep the product itself and take away only the packaging (collected for security reasons).

¹ ACCE, 2575B Dunwin Drive, Mississauga, Ontario L5L 3N9, Canada

² Colgate-Palmolive, 300 Park Avenue, New York, NY 10022

2. Days to Avoid Testing

Testing should be avoided on Sundays, the period between Christmas and New Year, Easter, and on major state holidays (1–3rd of May, 15th of August, 1st and 11th of November). Saturdays seem to be the most popular days for conducting central location tests.

3. Times of the Day Most Appropriate for Testing

The time depends on the type of respondents desired. When testing with “housewives,” the entire day may be appropriate provided that the testing location is on or near a busy (shopping) area. In this case, simple interception is sufficient to recruit the target audience. When testing with working people, evening hours on weekdays (after 4–5 p.m.) and mid-morning to mid-afternoon on Saturdays are recommended. Poles traditionally consume their dinners in the early afternoon (1:30–3:30 p.m.) and supper about 6:30–8:00 p.m.

B. POPULATION PROFILE

1. Demographic Information

Total population size is 38.2 million (2005 est.), 62 % living in the urban areas and 38 % living in rural areas (quite unique versus other European countries); the population is relatively young:

0–14	17 %
15–24	17 %
25–34	15 %
35–44	13 %
45–54	16 %
55–64	10 %
65+	13 %

In the next few years, Poland will be facing the problem of a large group of young people entering the labor market. The unemployment rate is already high, and the influx of this large new group may cause social problems. Since the early 90s, the Polish population is decreasing and aging, and by the year 2030, the population is expected to be only 36 million. For more detailed population information on Poland the reader is directed to the Central Statistical Office (GUS), <http://www.stat.gov.pl/> (Population Projection of Poland 2003–2030).

2. Economic Classes

Changes in the economy have set the foundation for social transformation in the Polish society. In communist times, there were four traditional social strata, farmers, physical workers, white-collar workers, and intelligentsia. In the nonmarket communist economy, income had low importance, and other factors, such as education or prestige, determined status in the society. For example, highly educated intelligentsia enjoyed a prestigious position in society in spite of low income. Since the transformation to the market economy, a new stratification system is being established by monetary value, education, and an entrepreneurial spirit. It is, however, difficult to fully apply the Western A, B, C system of economic stratification to Poland. Instead, the accepted system (as of 2002) is as follows:

Specialists	10.0 %
White collar workers	22.5 %
Entrepreneurs (mostly small business)	9.4 %
Skilled workers	41.4 %
Farmers	7.7 %
Unskilled workers	6.2 %

3. Subcultures

Poland is divided into 16 administrative provinces (voivodships), 373 counties (poviats), including 65 municipal ones, and 2489 communes (gminas). Poland has a fairly homogeneous population with 96.7 % of the people claiming Polish ethnic background. Officially the following national minorities are listed (2005): German 0.4 %, Belarusian 0.1 %, Ukrainian 0.1 %, other 2.7 %, including: Roms, Lithuanians, Lemkos, Slovaks, Russians, Jews, Armenians, Czechs, and Tartars. Nominally, 95 % of the population is classified as Roman Catholic. Other practiced religions include Protestantism, Eastern Orthodox Church, Judaism, and Islam. For more information about ethnic and national

minorities in Poland, the reader is directed to the Ministry of Internal Affairs at http://www.mswia.gov.pl/eng_spr_oby_mn.html (Ethnics and National Minorities in Poland).

4. Literacy Information

Officially, 100 % of the population is literate. However, it is recommended that all instructions for product testing be written in simple language to prevent misuse or misunderstanding.

C. GOVERNMENT RELATED ISSUES

There are no restrictive government regulations in Poland regarding market research. However, a variety of licenses, permits, or special health certificates may be required for agricultural products. When shipping product for testing in Poland, there are usually no problems with Customs. An official letter (using the sponsoring company stationary), specifying that samples of product are used for consumer research, should be sufficient. However, the reader should be aware that Poland is in the process of changing its existing systems of norms/standards as part of its EU-accession (Towards the Enlarged Union). It is highly recommended that all necessary government requirements be verified with the local authorities. For more specific information about new government requirements while testing in Poland, the reader is directed to the following government agencies: Polish Centre for Testing and Certification, <http://www.pcbc.gov.pl/ang/index1.htm>, Tel: +48 22 8579916.

D. MEASUREMENT SYSTEM AND CURRENCY

In Poland the SI metric system is used. Poles are not familiar with units such as ounces, inches, or gallons. Polish currency is Zloty (PLN). For currency conversion the reader is directed to the following website <http://www.x-rates.com/calculator.html> (Currency Converter 2005).

E. USE OF INTERNET IN CONSUMER TESTING

There are 10,600,000 Internet users in Poland (as of March/05) with the Internet penetration rate of 27.8 % and user growth of 278.6 % 2000–2005 (Internet User Statistics 2005). Although the penetration rate is growing fast and all major on-line service providers claim their presence in Poland, a wide-scale web-based consumer research is rather unfeasible at this time. However, for special issues/products this may be an appropriate research tool.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

Customs and agricultural inspections may cause delays unless paperwork is filled out correctly. Together with document preparation, custom clearance at a port of entry can take up to two to three days. Although some documents may be prepared in English, in order to speed up the clearance process it is advisable to have a Polish language translation of the names of the products involved.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Research agencies expect to receive test products two to three days before the field work commences. Appropriate transportation, storage options, and controls must be considered depending upon specific climatic conditions. Although the storage facilities in Poland vary in quality, since its accession to EU, the country is continuously improving its infrastructure as part of its EU commitments. Therefore, finding the right storage facility, and in particular in large cities, which are primary targets for testing, should not cause any difficulty.

C. SELECTION OF TEST SITE/FACILITIES

There are many research agencies in Poland. Most major western firms (including the U.S.) have offices in Poland or have affiliations with the local firms. Local affiliates should be contacted for their recommendations on reliable local test sites and facilities. Poland has no influential or large minorities that would warrant special product testing. To capture any possible variations in product preferences, most frequently used locations are: Warsaw, Katowice, Poznan Gdansk, and Krakow. For up-to-date information regarding main cities and their populations, the reader is directed to http://www.nationmaster.com/encyclopedia/Largest-cities-of-the-European-Union-by-population#Top_100_cities (Top 100 Cities 2005).

General information on testing facilities in Poland can be found at the following websites: www.imriresearch.com (International Market Research Megasite 2005), or <http://www.marketsdirectory.com> (The Markets Directory 1996/1997).

D. RECRUITMENT OF PARTICIPANTS

At present door-to-door recruitment, or a snowballing technique, is most effective due to a limited telephone penetration, especially in rural areas. While the majority of studies are still conducted using the one-on-one interviewing techniques, this seems to be due to the underdeveloped telephone infrastructure rather than a specific need for face-to-face contact. The number of telephones is increasing fast, especially cellular phones, and the number of CATI interviews is growing with no serious barriers to respondents being interviewed by phone. In large cities, such as Warsaw, the telephone penetration goes up to 80 %.

Both males and females are recruited for market research. As usual, the recruiting criteria depend on the research problem and the product tested. Sometimes the head of the household (usually a man) is the appropriate target, at other times the person who does most of the purchasing (usually a woman in the household), or the product user. For example, when testing personal products in Usage & Attitudes studies, two groups are sampled, users/buyers (men) and buyers (women who state that they buy this category of product for others). However, just as in Western Europe, females are the primary shoppers.

When recruiting special populations one needs to be aware of the following:

- Children generally require parents' permission (consent forms).
- Older people are often the easiest to recruit.

However, Poland has a serious "generation gap" (around the age of 55). Many people older than 55 are not able to catch up with the rapidly changing economy and free market situation. They "do not believe" advertising and are totally insensitive to the new language of the market. Concept and even simple product testing with these people generally produces very poor results.

E. OTHER DESIGN/PLANNING ISSUES

Most of the quantitative and qualitative research techniques used in the developed countries can be used in Poland. However, what many research agencies refer to as an in-depth interview, often falls short of the usual expectations. The interview is recorded, but the interviewers are often not qualified to do an in-depth interview. They follow a rigid questionnaire, with many open-end questions, rather than a discussion guide. However, Poland's access to the European Union further stimulates the process of adapting to the standards that a common market requires from its participants. With a local agency assistance, there should be no problem finding the right organization to conduct a proper in-depth interview. When doing qualitative research on some topics, it may be necessary to do separate groups for different genders and ages. Consult your local agency on this issue.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The official language is Polish. While English is often the language of commerce (especially for multinational firms), interviews/questionnaires with average Polish consumers are conducted in Polish.

B. QUESTIONNAIRE SCALES

1. General

Face-to-face interviews are recommended and generally, verbal instructions are preferred over written instructions. Polish consumers are not experienced in answering survey questions; therefore, self-administered questionnaires are less effective. They may have trouble answering self-administered questionnaires or dealing with sophisticated attitude measurement techniques. However, they are not reluctant to express their true feeling/thoughts due to fear of offending interviewers. The concept of a scale, however, poses no special problems to the Polish consumers. Showing cards with scales or brand names could be very helpful. Both horizontal and vertical scales can be used.

2. Scales to Avoid

Scales with fractional ratings may require some explanation and are not commonly used. As always, scales overloaded with positive categories (as shown below) should be avoided:

Liking (5-point scale)

Excellent	Doskonala
Very good	Bardzo dobra
Good	Dobra
Average	Przecietna
Bad	Zla

3. Recommended Scales

Five-or ten-point hedonic scales anchored with only extreme categories are most popular in Poland. For directional measurement, 9-point hedonic and 5-point 'just right' scales are also available.

Examples of typical scales are shown below

9-point hedonic scale

Like extremely	Ogromnie lubie
Like very much	Bardzo lubie
Like moderately	Srednio lubie
Like slightly	Troche lubie
Neither like nor dislike	Ani lubie ani nie lubie
Dislike slightly	Troche nie lubie
Dislike moderately	Srednio nie lubie
Dislike very much	Bardzo nie lubie
Dislike extremely	Ogromnie nie lubie

Purchase Intent

Definitely would buy	Zdecydowanie bym kupila (F)/kupil (M)
Probably would buy	Prawdopodobnie bym kupila
May or may not buy	Moze bym kupila, a moze nie
Probably would not buy	Prawdopodobnie bym nie kupila
Definitely would not buy	Zdecydowanie bym nie kupila

Liking/quality (5-point scale)

Very good	Bardzo dobra
Good	Dobra
Average	Przecietna
Bad	Zla
Very bad	Bardzo zla

Just Right scale (5-point)

Much too sweet	Zdecydowanie za slodka
Somewhat too sweet	Raczej za slodka
Just right	Slodka w sam raz
Somewhat not sweet enough	Raczej za malo slodka
Definitely not sweet enough	Zdecydowanie za malo slodka

Or alternatively

Much too strong	Zdecydowanie za mocna
A little too strong	Troche za mocna
Just right	W sam raz
A little too weak	Troche za slaba
Much too weak	Zdecydowanie za slaba

V. TEST ADMINISTRATION

A. LOGISTICS

Logistics in Poland do not vary distinctly from normal practices. No special considerations are required. However, all test related issues should be thoroughly discussed with the research supplier to prevent miscommunication. A research agency is usually responsible for transporting the test products to the test sites/locations. Some minor differences/considerations are summarized below:

- Central location tests are usually conducted in the research suppliers' facilities or rented halls (e.g., public libraries, cultural centers) located in the city centers.
- Prerecruiting consumers for a central location test is relatively easy.

B. TEST ADMINISTRATOR

While there are no real issues with respect to age or gender of the test administrator, a local affiliate should be a good source on specific local conditions and customs.

C. PAYMENT/INCENTIVES

Monetary compensation is an appropriate and popular form of payment. For home use tests, presents or money might be used. Cash is used most often for CLTs (CLT—tests with prerecruitment). Small incentives (gifts) are used for on the street recruitment, or for shorter face-to-face interviews in central location tests (up to 30 minutes). When interviewing high income professionals (opinion leaders, business people, medical personnel) compensation needs to be higher in order to attract them. The local agency/consumer facility or company affiliate can advise on the adequate incentive type and amount for the test being conducted.

VI. REFERENCES

Currency Converter, July 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY.

Ethnic and National Minorities in Poland, July 2005, URL: http://www.mswia.gov.pl/eng_spr_oby_mn.html, Ministry of Interior and Administrations of Republic of Poland, Warsaw.

International Market Research Megasite, July 2005, www.IMRIresearch.com. IMRI Ltd., Loughborough, LE12 8WG, UK.

Internet User Statistics & Population for 50 European Countries and Regions, March 2005, URL: <http://www.internetworldstats.com/stats4.htm#eu>, Miniwatts International, Inc.

Polish Centre for Testing and Certification (PCBC), July 2005, URL: <http://www.pcbc.gov.pl/ang/index1.htm> Warsaw.

Population Projection of Poland 2003–2030, July 2005, URL: www.stat.gov.pl/, Central Statistical Office, Warsaw.

The Markets Directory, 1996/1997, URL: www.marketsdirectory.com, White Plains, NY.

Top 100 Cities, July 2005, URL: http://www.nationmaster.com/encyclopedia/Largest-cities-of-the-European-Union-by-population#Top_100_cities, NationMaster.

Towards the Enlarged Union, Brussels, 9.10.2002, July 2005, URL: http://europa.eu.int/comm/enlargement/report2002/strategy_en.pdf, European Communities, Brussels.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **SPAIN**

Luis Guerrero¹ and Julián Briz²

I. INTRODUCTION

It is difficult to define the average Spanish consumer. Spain is a complex country where a mixture of very different cultures have a common language but different regional languages, values, and traditions. This diversity represents an important handicap in order to select the consumers for a survey. Normally it will be necessary to recruit a large amount of individuals to include all of this cultural richness and to obtain an adequate image which reflects the real country.

In general, Spain can be regarded as a typical Latin country, where the “savoir vivre” has an important effect on consumer’s behavior. Undoubtedly, the climate has influenced and still influences the life and habits of the population. The Spanish like to go out frequently. It is usual to see people enjoying lunch or dinner including “tapeo” or “tapas” or simply walking along the main avenues of the city. Terraces are full of people talking and having a drink at midnight, any day of the week, when weather conditions permit (an average of six months a year).

The Spanish are open-minded, amusing, nice, and very friendly, although they are very critical about their environment. Usually they face up to problems openly and with an ironic attitude. Most of them believe that Spain is a nation with a good balance between work and leisure and one of the countries with the best way of life.

The main industry of the country is tourism. Every year Spain is visited by more than 50 million tourists. Logically this influences the habits of the principal tourist areas. This aspect should be taken into account when choosing the place and dates for carrying out a survey.

Consumers could be suspicious of the interviewer in certain areas, for this reason his/her appearance, politeness, and identification are essential if a high level of participation is required.

The lack of punctuality is another important aspect to bear in mind, although it varies considerably from one place to another. In general, the infrastructures are well developed and they do not represent any problem when carrying out any type of study.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

In general, Spaniards react positively to all kinds of products. The population is basically neophilic and shows a noticeable curiosity towards unfamiliar things. They accept new products easily, although they would not change their own habits. Normally they answer honestly and in the majority of situations they express their opinions without any fear of offending the interviewer. Most consumers like to give their opinions and they show a great interest and seriousness when they are being individually interviewed. In this sense it is common for them to make a big effort to answer all the questions, and they feel uncomfortable when they cannot understand or answer a specific question.

Users of the product can be interviewed directly, although in the case of children it is better to have the permission of their parents. All the members of a family can be interviewed, since in general, there is not a family effect. This means that every component of the family unit would express and defend his/her own ideas with total freedom of speech regardless of gender or age.

Regarding the assessment of the samples, they can be evaluated without any problem by the end user of the product.

Surveys can be carried out both in the presence or in the absence of the interviewer. Although it is important to note that if the questionnaire is long, complex, or without real samples (e.g., attitude questionnaire) it is better to fill it in the presence of the interviewer, otherwise the number of

¹ IRTA-Centro de Tecnología de la Carne, Finca Camps i Armet, E-17121 Monells, Girona, Spain

² ETSI Agrónomos, Ciudad Universitaria, E-28040 Madrid, Spain

questionnaires duly filled in and returned will diminish significantly (Guerrero 1999). Generally speaking, the presence of the interviewer does not impact the opinion of the consumers.

An important social effect exists in certain aspects related to consumption of food and other products (Guerrero et al. 2000). For this reason it is important to guarantee the participants the confidentiality and anonymity of the questionnaires. When using a technique where several consumers take part simultaneously (e.g., Focus Group) it is important to bear in mind this social effect when designing, executing, and interpreting the results obtained.

Usually the meal planning and the food shopping within the family unit is done by women, so most of the interviews should be addressed basically to this segment of the population depending on the objectives of the survey. This tendency is less clear when consumers are under 35 years old, since these tasks are equally split between both genders.

When the test is carried out at the consumers' home, do not expect the unused portion to be returned. Consumers assume that the entire product given is for their personal use; for this reason they could feel annoyed if they are requested to return it. In general, it is not acceptable for food to be thrown away as it is regarded as unethical. In order to avoid obtaining information of repeated use of the product, it is advisable to provide each consumer with only the necessary amount of sample for each test (unless repeated use was the objective of the study). Accordingly, when the samples have to be used by different members of the same family and there is enough in one sample for all the individuals, it is quite common to use just one package, keeping the remaining food products for normal mealtime. Furthermore, all the individuals will taste exactly the same product reducing the expected variability within the product that will be obtained if each consumer had tested different packages.

Recycling leftover foods is unusual. Special containers for this process do not exist.

2. Days to Avoid Testing

In general, samples can be tested every day of the year, although an important part of the population fulfills the Roman Catholic tradition of not eating meat on certain Fridays prior to Holy Week (the dates vary every year, but are usually at the end of March and the beginning of April). This behavior still remains well established mainly within the older section of the population. Also, the days prior to main holidays, such as Christmas Eve (December 24th), New Year's Eve (December 31st), or La Asunción Eve (August 14th) should be avoided.

3. Times of the Day Most Appropriate for Testing

Normally meals are later than in the rest of Europe and the U.S. Lunch is usually served between 2 and 3 p.m. and dinner between 9 and 10 p.m. In general, lunch is the main meal and dinner is quite light. It is frequent to have a break at mid-morning (11 a.m.) and in the afternoon (5–6 p.m.). Depending on the product to be evaluated the best moment to taste it will be at lunch or one of the breaks cited above.

B. POPULATION PROFILE

Spain's mixed capitalist economy supports a gross domestic product (GDP) that on a per capita basis is three-fourths of the four leading West European economies.

1. Demographic Information

Spain is a Western European country with a population of 43 million people (INE 2005), with a growth rate of 1.34. Life expectancy at birth is 79 years, and ethnic groups are Mediterranean and Caucasian types. Religion is 99 % Roman Catholic and the languages spoken are Castilian Spanish in the whole country, and also simultaneously, in certain regions, regional languages: Catalonia, Galicia, and the Basque country.

2. Economic Classes

In order to have a comparative analysis of the economic classes we include the income distribution of Spain and EU-15 in 1999 in quintile (20 %) as a share of national total equivalent disposable income (%).

	Bottom quintile	Second q	Third q	Fourth q	Top quintile
EU-15	9	14	17	22	38
Spain	7	14	18	23	40

Source: Eurostat 2002.

People are ranked according to their income and then divided into five groups of equal size known as

quintiles. We observe that the situation in Spain is quite similar to the EU-15 in second, third, and fourth quintile, but lower in the first (bottom) and higher in the top.

The increase of annual income per capita in Spain has been (according to 2004 prices): from 9731 euros in 1994 to 11.514 euros in 1998 and 14.542 euros in 2002 (INE 2005).

3. Subcultures

Spain is a country very much based on tradition. It has a long history and it has been consolidated as a unified country for more than 500 years, so it has a similar background all over.

However, there are more aspects of interest to study. The most significant one is the different characteristics we may find in several regions (Castilia, Catalonia, Galicia, Basque country, Andalucia, etc.). Consumption habits and attitudes are different. However, there is a place where there is a representation of all the regions and groups: Madrid, the capital. Therefore, Madrid has been taken as a group representative for Spain, either under socio-economic or regional groups. According to some authors Zaragoza can also be regarded as representative of Spain.

In case there is a need to get into more detail, the market may be segmented in the different regions, with their specific situations.

In some regions, there are larger groups of immigrants coming from Latin America and Northern African countries, but their relative importance is still small and not relevant (an average of 7 % of the Spanish population according to the INE 2005). Immigrants should only be tested separately for specific ethnic foods or specific items.

4. Literacy Information

Literacy reaches 97 % of the population, which means that they can read and write. The legal system is a civil law at a National level with regional applications.

C. GOVERNMENT RELATED ISSUES

Spain is a member of the European Union, so it follows the European regulations complemented with national regulations.

Foreign trade is under the common European system. Economic and monetary policies are also coordinated from Brussels, and Spain is in the group that has accepted the Euro as the new currency.

The Ministry of Agriculture, Food and Fishery (Paseo Infanta Isabel 1, 28014 Madrid) regulates food products. However, dealing with consumers' health regulations, the responsible authority is the Ministry of Health and Consumption (Paseo de la Castellana 18, Madrid).

All the products have a registration number and there are specific regulations for labeling, packaging, storage, and transportation.

The following outlines some basic information about the country (as of year 2002):

Area: 544 782 sq. km

Population: 43 million

Human Development Index: 89.9

Adult literacy: 97.2 %

Urban population: 77.2 %

GDP: \$595.9 BN

Origins of GDP: Agriculture 8 %, Industry 30.5 %, Services 65.3 %

Structure of employment: Agriculture 8 %, Industry 30 %, Services 62 %

Unemployed 2002: 11.4

Consumer price inflation in 2004: 3.04 %

Trade:

Principal	exports (\$ bn FOB)	import bn cif
Raw material	47.6	68.4
Consumer goods	45.1	39.2
Capital goods	15.5	27.9

Society

Number of households: 13.8 million, with an average of three members in a family

Industries: textiles and apparel (including footwear), food and beverages, metals and metal manufacturers, chemicals, shipbuilding, automobiles, machine tools, tourism

Communications

Telephone lines per 100 pop.: 42.1 (2000)

Telephone system: generally adequate

Color TV per 100 households: 98.1

Mobile telephone subscribers per 100 pop.: 30.6

Computers per 100 pop.: 14.3

Internet host per 100 pop.: 16.8

Transportation

Railways: 15 079 km

Highways: 346 858 km

Airports: 99

Ports and harbors: Avilés, Barcelona, Bilbao, Cádiz, Cártagena, Castellón de la Plana, Ceuta, Huelva, La Coruña, Las Palmas (Canary Islands), Málaga, Melilla, Pasajes, Gijón, Santa Cruz de Tenerife (Canary Islands), Santander, Tarragona, Valencia, Vigo

Search engines: www.terra.es

www.yahoo.es

www.google.com

Financing:

Banco de España: www.bde.es

Bolsa de Madrid: www.bolsamadrid.es

EUROSTAT: <http://europa.eu.int/comm/eurostat/>

Instituto Nacional de Estadística: www.ine.es

Museo del Prado: <http://museoprado.mcu.es>

D. MEASUREMENT SYSTEM AND CURRENCY

The metric system is the measurement system used and the currency is the Euro.

E. USE OF INTERNET IN CONSUMER TESTING

Internet is becoming a common use by market researchers to recruit consumers and analyze the behavior in certain areas.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

There are national services, named “Servicio de Correos” (Regular) and “Postal Express” (Express), usually cheaper than private courier, either national or international.

The time period for the delivery is similar to other European countries, and usually is faster to urban than to rural areas.

Commercial goods do not need special government approval in the domestic market if they comply with general regulations. However, products coming from abroad (outside the European Union) may have customs inspections with no particular concern. If there are any doubts about the EU regulations, specific information may be obtained from:

- Ministerio de Economía: Dirección General de Comercio Exterior: www.mineco.es

- Instituto Español de Comercio Exterior (ICEX): www.icex.es (available in Spanish only)
- Chamber of Commerce

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Spain is located in a moderate weather area, but during the hottest season (summer) in the Southern regions (Andalucía, Extremadura) the temperature may reach very high levels. For that reason, the storage and the transportation conditions should be adequate in order to avoid spoilage of the samples and of the products. Therefore, specialized couriers may be needed with refrigerated conditions for summer periods.

C. SELECTION OF TEST SITE/FACILITIES

For a more efficient performance it is recommended to contact local agencies for test sites and facilities. However, is not always easy to get a reliable agency; therefore, the solution may be to get in touch with agencies with a national coverage. Thus, for the Chamber of Commerce of Madrid: www.camaramadrid.es

D. RECRUITMENT OF PARTICIPANTS

The recruitment of the participants for the test is conditioned by the budget, the topic, and the time available to get the information.

Phone interviews are very commonly used and are quite easily done. In order to reach the person to be interviewed (husband, housewife, etc.) the time of day selected for the phone call is important. Also, special attention should be paid to the maximum amount of time spent on the call—no more than 15 or 20 minutes per call. Another possibility for finding people to interview is at shopping centers, cafeterias, or even interviewing on the street, depending on the topic. When testing products, it is recommended to visit shopping centers, or special events like fairs or shows.

Door-to-door interviews are more difficult to get, since many people refuse to open the door of their house.

In case it is considered necessary for the study, a letter should be mailed in advance explaining the goal of the interview and subsequently a phone call should be made to make an appointment.

Direct contact with children may be done outside the school with the previous permission of the authorities and the parents. Elderly people are easily interviewed at special residences and recreation facilities.

According to the demographic pyramid, adult and elderly people are becoming the most important segments of the Spanish population.

E. OTHER DESIGN/PLANNING ISSUES

Some general recommendations are to over-recruit people because there is a “normal failure” of 10–15 % among the people that are supposed to go to the meetings or focus groups.

Another recommendation is to allow a 10–20 minute delay for the appointment time, due to the common excuse of traffic problems in big cities.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The official language is Castilian Spanish, although there are other coexistent languages such as Catalan, Basque, Valencian, or Galician which should not be forgotten when the survey has to be done in these regions. In this way, for instance, in Catalonia it is essential that questionnaires are in both languages and that the interviewer is bilingual if a high number of responses are required. The majority of consumers do not understand texture terminology, so these terms should be avoided in the questionnaires as much as possible. About 97 % of the population can read and write, although a significant proportion of elder people may have some problems in understanding certain questions, if they are too long, complex, or difficult grammatically (written in negative, conditional...). Back translation to the original language (e.g., English) is strongly recommended in all cases. Likewise the questionnaire to be used should be pretested by a small number of individuals in order to confirm its simplicity.

B. QUESTIONNAIRE SCALES

1. General

Most consumers do not read the instructions of the questionnaires, especially when they are long. For this reason it is better to use verbal instructions than written ones (Guerrero 1996).

Consumers are more familiar with horizontal than vertical scales. Their intensity should increase from left to right. In general, they understand the concept of scale and they feel more comfortable when using a verbal category scale.

In order to avoid errors, all the scales in the same questionnaire should be similar (same types of scale) and they should go in the same direction for all the questions.

Questionnaires should not be excessively long or complex, especially if they have to be filled in at home. Normally the number of questionnaires wrongly completed and returned unanswered is strongly correlated with their complexity and number of questions.

Spanish consumers like to express their opinions, and for this reason it is a very good practice to add some open questions at the end of the questionnaire to receive their comments, even when this information is not very useful for the objectives of the survey.

The population is not excessively superstitious, so all kinds of numbers, colors, shapes, etc., can be used in a consumer test.

2. Scales to Avoid

Normally Spanish consumers prefer fully structured nonlinear and nonnumeric scales, although all types of scales can be used if a short instruction for correct use is given.

3. Recommended Scales

- (a) Horizontal verbal category scale (attitude scale, 7 points):

Para mí consumir productos cárnicos con poca sal es: (For me, consuming low salt meat products is:)

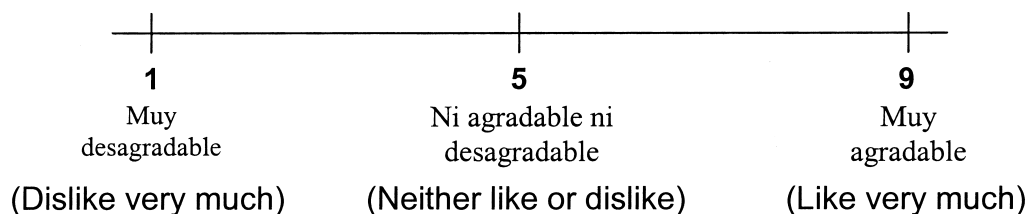
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Muy nocivo	Bastante nocivo	Ligeramente nocivo	Ni beneficioso ni nocivo	Ligeramente beneficioso	Bastante beneficioso	Muy beneficioso
Extremely harmful	Quite harmful	Slightly harmful	Neither harmful or beneficial	Slightly beneficial	Quite beneficial	Extremely beneficial

- (b) Vertical verbal category scale (acceptability scale, 9 points):

¿Qué opina del sabor de la galleta X? (What is your overall impression about the cookie X?)

- Extremadamente agradable (Like extremely)
- Muy agradable (Like very much)
- Agradable (Like moderately)
- Ligeramente agradable (Like slightly)
- Ni agradable ni desagradable (Neither like or dislike)
- Ligeramente desagradable (Dislike slightly)
- Desagradable (Dislike moderately)
- Muy desagradable (Dislike very much)
- Extremadamente desagradable (Dislike extremely)

- (c) Horizontal lineal and numeric semi-structured scale (acceptability scale): Califique globalmente su impresión sobre la muestra Y. (Score your overall impression about the sample Y.)



V. TEST ADMINISTRATION

A. LOGISTICS

In order to carry out a survey in Spain there are two important aspects to bear in mind: probably some of the participants will arrive late and it is possible that about 10–15 % will not come. For this reason it is recommended to recruit more individuals than necessary. Usually the session should start about 30 minutes after the scheduled time.

In general, the Spanish are extrovert and amusing, so it is relatively easy to obtain their involvement in discussions and to have their opinions and experiences. Sometimes the main problem will be the opposite: to avoid long explanations without offending them. In focus groups, it will probably be more difficult to avoid jokes and irony than to have a good participation from the individuals. However, this clearly has an important advantage because it is very easy to have a relaxed environment and the participants quickly forget the video and audio recorders.

Spanish consumers are curious and like to be informed, and for this reason it is strongly recommended to start all the sessions with a wide and clear explanation about the objectives of the meeting, the importance of their task, etc.

In general, there are no special conditions to prepare or present the samples, or both. Recommendations are similar to those used in the rest of Europe or in the U.S.

Consumers assume that all products provided are safe for consumption and without odd ingredients, so normally it will not be necessary to explain the composition (additives and ingredients) of the products to be evaluated.

B. TEST ADMINISTRATOR

It is recommended that the test administrator is a woman, especially when consumers have to be recruited in the street or in a central location. In these cases the appearance is essential. She should be well dressed and depending on the region she should be bilingual (Catalonia, Basque country, and Galicia). When the test has to be carried out in controlled conditions (laboratory, school, etc.) where consumers have been recruited previously, the test administrator should match as closely as possible the socio-economic group of the consumers involved.

C. PAYMENT/INCENTIVES

It is frequent to reward consumers' participation by means of a small gift. Although there are clear differences depending on the geographical zone and the economical status of the participants, in general it is better to motivate them with a small present than with money. This gift should be given directly to the participant. Even when working with children their parents will appreciate more a present for their children than for themselves. There is also a possibility of giving the participants a gift voucher from a department store or something similar. This is especially advisable if the age groups are varied because this enables them to choose what they want and there are no risks of choosing an inappropriate gift for a particular group of people.

VI. REFERENCES

EUROSTAT, 2002, Statistical Office of the European Communities. URL: <http://europa.eu.int/comm/eurostat/>. European Commission, Brussels, Belgium, 17 June 2005.

Guerrero, L., 1996, Market research?; Yes, but... Market Research Workshop, Lillehammer, Norway. In: Food for the consumer. Measurement of consumer attitudes. AIRCAT series of meeting reports, Vol. 2, No. 1, p. 49.

Guerrero, L., 1999, Estudios de consumidores: Análisis de los errores más habituales, In: *Avances en Análisis Sensorial*, T. C. A. Almeida, G. Hough, M. H. Damásio, and M. A. A. P. da Silva, Eds., CYTED, Varela Ltda. pp. 121–129.

Guerrero, L., Colomer, Y., Guàrdia, M. D., Xicola, J., and Clotet, R. (2000), Consumer attitude towards store brands. *Food Quality and Preference*, 11, 387–395.

INE, 2005, Statistical data for Spain. URL: <http://www.ine.es>. Instituto Nacional de Estadística, Madrid, Spain, 18 June 2005.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **THAILAND**

Varapha Kongpensook,¹ Edgar Chambers IV,² and Chintana Oupadissakoon³

I. INTRODUCTION

The Kingdom of Thailand is situated in the center of Southeast Asia, with Bangkok as the capital city, a large metropolitan area. Thailand’s land area is 198 114 square miles (513 115 square kilometres). Thailand is approximately 1553 miles long from north to south and the widest part is approximately 776 miles from east to west. The country shares a border with Burma (Myanmar) on the west and north, Laos People’s Democratic Republic on the north and east, Cambodia on the southeast, and Malaysia on the south. It borders two bodies of water, the Gulf of Thailand (1143 coastal miles) and the Andaman Sea of the Indian Ocean (528 coastal miles).

Thailand is divided into 76 provinces (changwad) with five main regions (Central, Northern, Northeastern, Southern, and Eastern) with a diversity of landscape and natural resources.

TABLE 1—*Provinces in five regions of Thailand.*

Region	Provinces
Central (22 Provinces)	Bangkok (Krung Thep Mahanakhon), Ang Thong, Chachoengsao, Chai Nat, Kanchanaburi, Lop Buri, Nakhon Nayok, Nakhon Phanom, Nonthaburi, Pathum Thani, Phra Nakhon Si Ayutthaya, Prachin Buri, Phetchaburi, Ratchaburi, Prachuap Khiri Khan, Sa Kaeo, Samut Prakan, Samut Sakhon, Samut Songkhram, Sara Buri, Sing Buri, Suphan Buri
Northern (17 Provinces)	Chiang Mai, Chiang Rai, Kamphaeng Phet, Lampang, Lamphun, Mae Hong Son, Nakhon Sawan, Nan, Phayao, Phetchaburi, Phichit, Phitsanulok, Phrae, Sukhothai, Tak, Uthai Thani, Uttaradit
Northeastern (19 Provinces)	Amnat Charoen, Buriram, Chaiyaphum, Kalasin, Khon Kaen, Loei, Nakhon Pathom, Nakhon Ratchasima, Nong Bua Lamphun, Nong Khai, Maha Sarakham, Mukdahan, Roi Et, Sakon Nakhon, Sisaket, Surin, Ubon Ratchathani, Udon Thani, Yasothon
Southern (14 Provinces)	Chumphon, Krabi, Nakhon Si Thammarat, Narathiwat, Pattani, Phangnga, Phatthalung, Phuket, Ranong, Satun, Songkhla, Surat Thani, Trang, Yala
Eastern (4 Provinces)	Chanthaburi, Chon Buri, Rayong, Trat

The Central Region and its plain has the highest fertility, is an extensive rice-producing area, and has many major industries around the densely populated area of Bangkok. The Northern Region comprises a mountainous area of natural forest, ridges, and deep, narrow alluvial valleys. Chiang Mai is the second-most populous city and province and is the center of the Northern Region. The Northeastern Plateau Region is an arid region with a rolling surface and undulating hills. The large Nakhon Ratchasima Province serves as the gateway to the Northeastern Region. Khon Kaen and Ubon Ratchathani are considered regional development provinces in the Northeastern Region after the establishment of government universities there. The rain-forested Southern Region peninsula is hilly, thick in forests, and has rich deposits of minerals and iron ores. This region is the center for the production of rubber and the cultivation of other tropical crops, and also is home to many Thai Muslims. Hat Yai, the major business district of Songkhla Province, serves as a regional center in transportation, communications, and education. Phuket is a major tourist attraction in the south. The Eastern Region, including Chon Buri Province, is known primarily as a major tourist area because of the beautiful seashores and good sources of seafood. From 1998, the eastern seaboard also was

¹ PH.D., Chulalongkorn University, Department of Food Technology, Faculty of Science, Phyathai Road, Patumwan, Bangkok 10330, Thailand

² Ph.D., Kansas State University, Sensory Analysis Center, Department HN, Justin Hall, Manhattan, KS 66505-1407

³ PH.D., Kasetsart University, Department of Product Development, Faculty of Agro-Industry, 50 Paholyothin Road, Bangkok 10900, Thailand

established to be the main business area of the petroleum industry and shipping. A new Bangkok International airport “Suvarnabhumi” (code BKK), situated approximately 30 miles from Bangkok, opened in the eastern area in late 2006 for both international and domestic travel and shipping. However, the older airport (Don Muang) still may be used for some domestic air service and some shipping. Thus, it is imperative to determine what airport is being used for domestic travel and air shipments.

Thailand has a warm, tropical climate year round. The temperature varies from 17 to 40°C (63 to 105°F). The humidity typically varies from 65 to 85 %. There are three seasons: the cool season, the summer, and the rainy season. The cool season is between November to February when temperatures in the north may drop to 60–65°F (~17°C). The summer is from March to May when average daily temperatures can easily reach 100–105°F (~40°C). The hottest month is April. The rainy season is normally from July to October, during which short periods of rain are common on a daily basis from the annual monsoon. On average, the climate in the north is cooler than the central plain (approximately 10°F lower). The northeastern area is dry and hot. The south is more humid and rainy. The eastern and some parts of the south are more comfortable as they are close to the sea where the temperature generally is a few degrees lower and breezes from the water are common.

Thailand is the only country in Southeast Asia never to have been colonized; it was known for centuries as Siam. Since 1932, it has been a democratic constitutional monarchy. The government is comprised of the king (as of the 1990s a queen is allowed to ascend to the throne) and a political government headed by a prime minister. The political government is formed by a bicameral parliament that is composed of elected representatives and appointed senators. The Prime Minister, the head of the government and chief executive, is selected from among members of the House of Representatives. Thailand is predominantly a Buddhist country where Buddha images are hallowed. The Monarchy and Buddhism are the two sacred institutions in Thailand. Thai people hold the Thai Royal Family in great reverence and they will not tolerate any disrespect shown to their Majesties either by word or deed. Sacrilegious acts are punishable by imprisonment even if committed by foreign visitors, although this is rarely implemented.

Thailand’s economic development policies are based on a competitive, free market philosophy. As the result of the rapid, strong economic growth over the past two decades, a growing middle class with considerable purchasing power has become important. The United States Agency for International Development closed its regional support mission in Thailand in 1995 in recognition of the decreasing need for outside economic assistance. As an open country with increasing wealth, western lifestyles are merging into Thai culture. Western-style shopping malls and supermarkets are replacing the traditional markets in larger cities. Demand for imported and western-style consumer products is increasing. Convenience foods and western-style fast-food restaurants are gaining popularity. Thai people love to socialize and enjoy going out, eating out, and shopping, not only on special holidays or festivals. Overall Thais spend 23 % of their food budget on food eaten away from home, with up to 50–60 % of the food budget spent this way in larger cities. Thai people enjoy entertainment. All types of music, from Thai folk songs to orchestra, are on the radio. Movie theaters are common in almost every shopping center and Thai and international fast food and sit-down barbeque type restaurants also are common. “Movies and dining” are common activities for Thai teenagers and young adults.

Western-style dress is usual for Thai people, with traditional costume usually used only on special occasions, for parties or ceremonies, or for shows in areas where tourists congregate. Business attire is similar to that in many western countries. Suits are expected for men during major business meetings, but dress slacks and dress shirts (often short-sleeved) are common and more typical on days when meetings are not scheduled. Jeans are considered too casual for men and pants generally are too casual for women. Shorts, tank tops, and sandals are inappropriate for work places and most public places, including temples. The Thai government has promoted the wearing of clothing from Thai silk and cotton by officials and other people at least one day per week.

The Thailand market is a diverse one demographically. Targeted consumer research has shown success in the marketplace and is being used increasingly by local and multi-national companies. There are a number of local and multi-national market research companies in Thailand and marketing staff have been key players in conducting product tests and consumer research. Focus groups have been conducted most commonly by staff within the company. The Internet is not regularly used for product testing in Thailand.

Additional and other summary information on population and cultural issues in Thailand can be found at many places on the Internet. The Thai National Statistical Office (NSO) site provides census-based data (<http://web.nso.go.th/eng/index.htm>) in both Thai and English. However, other sites may be

easier to use summaries or provide data on holidays and other information not provided by the NSO. Other useful sites include:

<http://www.tourismthailand.org/home.php>

http://www.unicef.org/infobycountry/Thailand_statistics.html

<http://www.phrasebase.com/countries/Thailand.html>

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

A typical Thai family is a large extended family including grandparents and cousins who may be living together. This is done not only for economic reasons but also because it encourages natural courtesy, tolerance, and mutual respect. It is common for several generations of a family to live in the same house or area, although they may live on different floors or nearby. Often the kitchen is shared. However, the number of western-style “nuclear families” is growing rapidly among the younger generation. Many Thai women work full time; being a homemaker or working at home is less frequent, except in rural areas where home-based businesses are common.

Thai social behavior is based on respect for superiors, parents, teachers, and the elderly. The avoidance of extremes and violence, and the attainment of harmony are cores of Buddhism. Thus, a desire to please and the avoidance of conflicts or the avoidance of showing a bad temperament are hallmarks of Thai people. Verbal abuse is considered violent and, thus, is improper. Straight criticism can be seen as a form of verbal abuse. This may have implications for the testing of products because of the tendency not to want to directly criticize.

There is a tendency for people to be more reserved and less likely to question or directly express a difference of opinions. Thus, silence, as a form of disagreement, must be taken into consideration when conducting focus group studies. Questions should be asked for specific answers. However, Thais use many different products and are willing to try new and different things. There is no problem in talking directly to the end user. Samples can be presented to the intended user including children as long as permission is obtained. In general, Thais are generous and willing to help others. They generally are willing to complete questionnaires when they were asked to in intercepts. The coordinator must arrange a comfortable place for them to work. Outdoor tests should be avoided since the outside temperature is always warm or hot and humid and, therefore, may be uncomfortable.

TABLE 2—*List of national holidays.*

Holidays	Date
New Year's Day	January 1
Makha Bucha Day	Full moon day of 3rd month Lunar calendar, usually in February or March
Chakri Memorial Day	April 6
Songkran Festival	April 13 (many people take 3–5 days off at this time)
National Labor Day	May 1 (only private sectors close)
Coronation Day	May 5
Royal Ploughing Ceremony Day	Depends on the Lunar calendar, usually in 2nd week of May (only government sectors close)
Visakha Bucha Day	Full moon day of 6th month Lunar calendar, usually in May or June
Asalha Bucha Day	Full moon day of 8th month Lunar calendar, usually in July
Buddhist Lent Day	A day after Asalha Bucha Day
H.M. The Queen's Birthday (Mother's Day)	August 12
Chulalongkorn Memorial Day	October 23
H.M. The King's Birthday (Father's Day)	December 5
Constitution Day	December 10
New Year's Eve	December 31

2. Days to Avoid Testing

Thailand has many festivals and holidays (at least 14 national holidays and other regional or local holidays) throughout the year.

Most national holidays serve to evoke a sense of the monarchy, Buddhism, and the nation. Some holidays are celebrated by the lunar calendar and, thus, vary in date from year to year, while others are celebrated according to the solar calendar. Thus, it is essential that the local calendar of the test area be checked carefully. If holidays fall on the weekend, the next Monday generally will be a compensated holiday. As is common in other countries, the international solar calendar with a leap year every four years is officially used in Thailand.

Testing should be avoided on major holidays such as the international new year (31st December and 1st January) and the Songkran, the Thai new year festival (the week of 13th April). It may not be easy to conduct testing on other holidays and weekends, but it may be possible to conduct a test on those days depending on the objectives and research plan and the willingness of the local research agency to conduct the test. Tests in shopping malls may be conducted on holidays and weekends, since department stores and supermarkets usually are open.

3. Times of the Day Most Appropriate for Testing

Government offices operate Monday to Friday from 8:30 a.m. to 4:30 p.m. with a noon to 1:00 p.m. lunch break. Private sector offices generally are open from 8:00 a.m. to 5:00 p.m. Some companies expect employees to work on Saturday. Department stores usually open from 10:00 a.m. to 9:00 or 10:00 p.m. depending on the day. Many larger stores open 12–13 hours a day, 7 days a week. Lunchtime usually occurs sometime between 11:30 a.m. and 1:30 p.m. Dinnertime varies depending on the household. Thais usually take a break at mealtimes and it may be quite difficult to conduct tests during those times. Mealtimes are a social time. Even when going out with business partners or colleagues, business usually is not discussed at mealtimes.

People in Bangkok and other large cities are busy. Appointments have become an acceptable custom to Thai people to facilitate meeting with other people. Thus, prerecruited tests are possible and may be desirable for certain objectives. Late morning hours between 10–12 noon, early afternoon (1:30–3:30 p.m.), and evenings (after office hours, but before dinner) are most convenient for testing. When research requires testing male participants, evenings may be recommended. Due to the traffic congestion in big cities, morning and evening rush hours (7–9 a.m. and 4:30–6 p.m.) should be avoided if the participants have to commute to test facilities. Regardless of the time scheduled for testing, prerecruited tests should allow for substantial over-recruiting or have a mechanism for allowing participants to make changes in their appointed times.

For recruiting, it may be easier to find participants at work places during the daytime or at shopping malls in the evening or weekends rather than at home. It is possible to find people at home after 7 or 8 p.m.

B. POPULATION PROFILE

1. Demographic Information

As of 2000 the population of Thailand was approximately 61 million with an annual growth rate of 1.05%; about 6.3 million people live in Bangkok. The gender ratio (male: female) is 49:51. Approximately 54% of female population (older than 15) is employed outside the home.

Seventy-five percent of the population is Thai. The largest ethnic minority is Chinese (14 %) and other ethnic groups include Malays (3.5 %), Cambodians, Vietnamese, Indians, and small predominantly mountain-dwelling tribes. Many of the smaller ethnic minorities, including Malay live near the borders of their “mother” country and may not be assimilated into the Thai culture. Overall, there is enormous cultural and social unity.

The official national language, spoken by almost 100 % of the population, is Thai. However, slightly different dialects are spoken in different parts of the country. Chinese and Malay are spoken in some areas, and English can be used for some communication, especially in business or with younger generations, in Bangkok and other large cities. Other languages such as Japanese, French, and German are used in some businesses.

Buddhism is the official religion of Thailand, and is the faith of 94 % of the population. The government permits religious diversity with absolute freedom. Islam (4 %), Christianity (1 %), Hinduism, and other faiths are practiced and protected by the constitution.

TABLE 3—Percentage of households with appliances.

Selected Housing Characteristics and Appliances	Municipal Area (5 136 500 households)	Nonmunicipal Area (10 525 800 households)
Gas for cooking	74.6%	49.0%
Charcoal for cooking	6.3%	22.9%
Wood for cooking	3.7%	21.4%
Flush toilet	18.3%	3.3%
Molded bucket toilet	72.5%	91.9%
Television (color/black & white)	95.2%	89.7%
Radio, Radio-tape	86.6%	72.7%
Refrigerator	85.4%	67.6%
Telephone	56.9%	13.5%
Air conditioning	25.4%	2.9%
Electric fan	95.7%	89.0%
Automobile	37.7%	19.0%
Motorcycle	56.1%	68.6%

2. Economic Classes

The 2000 survey from Thailand's National Statistical Office showed the average monthly income of households at 12 150 Baht (~\$US 340), and of an individual at 3358 Baht (~\$US 82). The average monthly expenditure of households was 9848 Baht (~\$US 243), and of an individual was 3342 Baht (~\$US 82). The most recent figures can be found at <http://web.nso.go.th/eng/index.htm>. Generally speaking, there is a large socio-economic gap between people in cities and rural areas and between rich and poor in cities. The population is mostly rural; 67.2 % of households are in nonmunicipal areas.

However, as Thailand continues to industrialize, its urban population (18 % of total population, principally in the Bangkok area) is growing by people migrating from the rural areas to cities. It is common to find heads of households moving into larger cities to work in industry to support the elderly and children still at home in the rural area. The numbers of middle class families in Bangkok and other large cities has been increasing for some time.

3. Subcultures

Thailand's population is relatively homogeneous and shares a common culture. This core population includes the central Thai (36 % of the population), Thai-Lao (32 %), northern Thai (8 %), and southern Thai (8 %). The largest minorities are the Chinese (about 11–12 % of the population) and Muslims (heaviest population in the most southern provinces) who have migrated from Malaysia and speak a Malay dialect (3 %).

Diversity of religions may affect subcultures. Although most Thais eat a varied diet, some Buddhists are vegetarians and others may not consume beef. Muslims do not consume pork, and meat (beef and chicken) must be *halal*. As with any consumer research it is important to match the test population to the objective. Studies that target vegetarians, ones that involve testing meat, or tests of products that target certain religious practices should inquire about specific consumption during screening.

Locations for testing also will depend on objectives. In some cases, e.g., product screening of convenience foods, a test in Bangkok may be sufficient because the largest number of potential users are in Bangkok. However, if market expansion throughout Thailand is key to success, additional markets must be tested because traditional products vary from region to region and may impact the desirability of new product choices. Anytime consumer studies are conducted that intend to represent the population of Thailand, tests probably need to be conducted in at least one site each in the Central (e.g., Bangkok), North (e.g., Chiang Mai or Chiang Rai), South (e.g., Songkhla), and Northeast (e.g., Khon Kaen) Regions.

4. Literacy Information

Universal, free public education is compulsory for most Thai citizens for a period of nine years. Education accounts for 16 % of total government expenditures. Current figures indicate that 94 % of the adult population (age 15 and over) is literate. The language of the central Thai population is the language taught in schools and used in government. English is the second language of the elite and middle class, followed by Chinese.

C. GOVERNMENT RELATED ISSUES

The Thai Food and Drug Administration (TFDA), Ministry of Public Health (www.fda.moph.go.th/enginfo.htm) approves most consumer-oriented food and other consumer products. Exporters of most

consumer products, such as food, to Thailand must be licensed with the TFDA. Most consumer-ready products are deemed “specific control” products and must be registered and undergo thorough product analysis. Product samples must be submitted to the TFDA for examination. Samples must be submitted with seven copies of the package label (showing the ingredients by percentage), descriptions of the packaging and manufacturing process, and a certifying letter from the product manufacturer. For bulk shipments, the TFDA requires a photograph clearly showing the product name, manufacturer’s name, and net weight. The registration process takes two weeks to six months.

By law, the TFDA can question all claims made for products (e.g., cosmetic products that claim to “lighten skin”) and this often occurs. Supporting documentation showing the use of standardized techniques or letters from experts who have examined the test procedures may be required for the importation or sale of certain products. Comparative claims are not permitted.

Import goods are required to obtain an import license from the Ministry of Commerce. For more information, contact: Ministry of Commerce (MOCNet), Sanamchai Rd., Pranakorn, Bangkok 10200, Thailand. Tel: 662-282-6171-9, Fax: 662-2800775, or www.moc.go.th (in Thai and English). Products, imported for consumer testing purposes only and that will be discarded after testing, must have that information posted or declared on documentation. There is no license required for products imported for testing purposes. Shipping through professional transport agencies often is more convenient since they will carry all documents and be familiar with regulations.

The Customs Department, Ministry of Finance is responsible for collecting revenue and facilitating business transactions both domestically and internationally. Imported shipments are controlled by the Customs Department. For more information, contact:
<http://www.customs.go.th/Customs-Eng/indexEng.jsp>

In addition, the Agricultural Office of the U.S. Embassy can provide some information and services about import regulation. For more information, contact:

U.S. Embassy, Bangkok
Agricultural Counselor
Tel: (662) 205-4000 ext. 2241
Fax: (662) 255-2907

D. MEASUREMENT SYSTEM AND CURRENCY

The metric system is commonly used. Some units in the English system such as cup, teaspoon, and tablespoon also are used in cooking preparation. Temperature is always reported in degrees Celsius.

The currency of Thailand is the “Baht.” One Baht is divisible into 100 Satangs. The notes are 20, 50, 100, 500, 1000 Baht. The common coins are 1, 2, 5, and 10 Baht. Major credit cards are accepted by hotels and large shops, but cash is the preferred tender almost everywhere. Checking accounts are almost unheard of. Travelers checks are not widely accepted outside of hotels, and must be cashed in banks (not all banks will do this) or at locations in the airport and major shopping centers. The current exchange rate can be found at: www.x-rates.com/calculator.html

E. USE OF INTERNET IN CONSUMER TESTING

Use of the Internet is growing rapidly in the major cities in Thailand. The Internet Information Research Center, National Electronics and Computer Technology Center (NECTEC) reported that in 2004 there were 6 970 000 Internet users in Thailand (<http://iir.ngi.nectec.or.th>) with an increasing trend. Internet users are professionals and management (middle and upper positions) and students, as computers are commonly used in offices and schools. Home computers have become popular for middle and upper class families. Therefore, use of the Internet in consumer testing and surveys in major cities is possible, using standard procedures, with the specific limitation of the target groups. Internet use outside of major cities is extremely limited.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

International express service for shipments is recommended. Procedures vary slightly from company to company but can be found at each company’s web-site (e.g., <http://www.dhl.co.th>). Regular postal service, whether surface or air, is made difficult by customs checks and is not recommended. Packages sent may be subjected to customs declaration at destination. As in many countries, regulations are complicated and can be confusing (thus the recommendation to use a commercial shipper) regarding

which products will require inspection, licenses, or tax or duty to be paid. Packages not exceeding 20,000 Baht (~\$560) in value may be exempt from tax.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

The climate in Thailand is hot and humid most of the year. Very high temperatures (40+ °C/100 + °F) in the summer season (March to May) and very high humidity (>80 %) in the rainy season (June to October) are special considerations for shipping and storage conditions. Because the climate is warm and humid year round, storage conditions must be specified and provisions made for any special needs such as refrigerators and freezers. It should be kept in mind that many consumers do not have air conditioning and those that do often cool only a few rooms. It is unlikely that areas such as kitchens or food storage areas would be air conditioned. Special properties of packaging materials are also required to protect samples from moisture change. Samples must be protected from insects, pests, and rodents during storage.

Because heat and humidity are usually high, it is especially important in Thailand that good practice procedures for storage be carefully considered and used. For example, allowing products to sit in automobiles or on loading docks, even for a short time, would be extremely detrimental to many products.

C. SELECTION OF TEST SITE/FACILITIES

Traffic and parking spaces are major problems, especially in Bangkok and suburban areas. People generally are not willing to commute out of their routine routes. Several test sites should be considered for any study that expects to represent a wide range of the urban population. For urban areas, a test site should be located at or near a landmark that is easy to get to. Recommended test sites can be a rented space in shopping malls, a conference room, or school/university facilities, etc. For rural areas, the center of the community such as a conference room in a government building, temple, or school may be used as a test site if permission has been granted. These places are commonly used for other community activities such as community meetings, fairs, or other services.

In Thailand, there are a limited number of research firms. Field agencies in Thailand are limited. In addition to a general Internet search for agencies, a list of some local market research agencies can be found at various sites including:

http://www.thaiadvertising.com/thai/Mkt_specialists.htm (in English)

<http://www.ethailand.com/directory/> (in English) (search words such as “market research”) or

<http://www.marketingthai.or.th/> (in Thai)

D. RECRUITMENT OF PARTICIPANTS

Direct communication is best for respondent recruitment. There is no specific protocol for the culture (e.g., both men and women may be approached). The telephone is not a particularly effective way of recruiting, although once contact has been established, the telephone may be an appropriate method for follow-up. Many people do not have telephones and among middle and upper class households where telephones are common, families often have maids who screen telephone calls. Calls made in the evening have more chance to reach the owners of the house, but an increasingly common phenomenon in Thailand is the use of one telephone number to reach multiple different people on their cellular telephone. Not only must you know the initial published telephone number, but you must also know the code for the person you are attempting to reach. Cellular telephones are very popular and commonly used by middle and upper class consumers. Such telephones can be used for follow-up, once initial contact has been made.

In larger cities, door-to-door interviewing is difficult because of security issues. Most people do not like to talk with strangers at their home, nor may it be possible to get past security gates or guards. In contrast, this system often works effectively in rural areas. People in smaller villages are more friendly and hospitable to strangers and are more used to contact at home.

The “snowball” referral system can be used very effectively in Thailand. Recruiting a few people and using them to “spread the word” works well. Having friends and relatives suggest that potential participants call the test recruiter can be more effective than “cold calling” if a database is not already available. The advantages and disadvantages of this technique are similar to those for other countries.

Thai people love going out, eating out, and shopping. Intercepting consumers in public places is the most convenient way to contact them. In larger cities, shopping centers are a good place for intercepting consumers because of the number of shoppers who visit them. However, temples, schools,

and marketplaces are the center of life in smaller villages in rural areas and may be the most appropriate places for contacting consumers. Regardless of the place in which consumer contact is made, the interviewer must obtain permission from the owners/managers of the property (or monks of a temple) before approaching potential respondents.

No special consent is required. However, ethical considerations and precautions for testing certain populations, such as children, are expected as in other countries.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The primary language is Thai. As with many languages, nuances can be quite important. When questionnaires are translated from other languages a Thai should thoroughly and carefully read the translation or the translation should be made by a native Thai translator. If the questionnaire is developed in another language, in general it is best to have the questionnaire and any instructions translated into Thai and then translated back into the original language by another translator as a check.

There are certain peculiarities in speaking the Thai language. For example, Thai is a tonal language, meaning that the voice inflection can completely change the meaning of words; one word may mean as many as five completely different things depending on vocal pitch. Thus, it is essential that if questions are asked verbally, interviewers understand what information is needed. Of course, it is essential that the interviewer is fluent in both reading and speaking Thai.

Slightly different dialects are spoken in some parts of the country. However, the central dialect is understood by most of the population. At a minimum, in areas where the researcher is unsure of local dialect issues, a local person familiar with sensory testing or surveys should review the questionnaire for clarity. In rare cases where the test needs to be conducted in multiple dialects (e.g., testing with hill tribes in Northern Thailand), local interviewers who understand and can speak multiple dialects should be trained to conduct the interviews in person.

Literacy is high in Bangkok and larger cities. There are minor literacy problems in some groups of the population such as the poor, elderly, and children in rural areas. There are two primary options for testing in these special cases. If the population has low literacy, the use of simplified questions with easy language adapted to the target population may be used. For cases where simple reading is a problem (for example, where there is extremely low literacy or where uncorrected vision problems occur such as might be found in the elderly in rural areas) the use of in-person one-on-one questioning may be necessary. Thai people often ask more questions or may take longer to do the test than is typical in the U.S. and European locations. Thus, staffing often must be increased to accommodate the extra questions and one-on-one assistance that may be needed even when conducting testing in group settings.

As recommended for any consumer tests, the questionnaires should be pretested before the study is conducted.

B. QUESTIONNAIRE SCALES

1. General Issues

Language is read from left to right. Scales can be orientated vertically or horizontally as in many other languages. Translation of scales can be made for most types of scales.

One consideration is that the Thai people are similar to other Asian Pacific Rim Countries in having a pleasing manner, being polite by not expressing negative responses and avoiding extreme responding. Some Thais may say, "OK," which could mean either "good" or "not so good." In focus groups or interviews, the interviewer must probe carefully to determine what people really mean. Thai consumers have been shown to use a smaller range of the 9-point hedonic scale than Americans (Yeh et al. 1998), but there is little evidence to suggest that major scale modifications are needed. It is unknown whether increasing the scale length or using a different type of scale would have an impact on scale use in Thailand.

2. Scales to Avoid

In general, most scales, appropriate for testing in the U.S., probably can be used or adapted for use in Thailand. Unstructured line scales or other scales may not be quickly and easily understood and probably should be avoided. Any language used on the scale must be translated into Thai.

3. Recommended Scales

Thai consumers are familiar with structured scales, whether labeled at each point or labeled only on the ends. Most have no difficulty using scales in the typical point range of 5–9 points used on many consumer-type scales. Nominal and ranking scales are used frequently in many questionnaires.

Examples of scales:

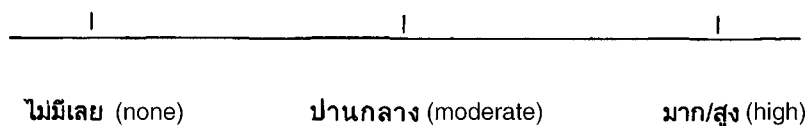
9-point hedonic scale

1=	ไม่ชอบมากที่สุด	(Dislike extremely)
2=	ไม่ชอบมาก	(Dislike very much)
3=	ไม่ชอบปานกลาง	(Dislike moderately)
4=	ไม่ชอบเล็กน้อย	(Dislike slightly)
5=	เฉยๆ	(Neither like nor dislike)
6=	ชอบเล็กน้อย	(Like slightly)
7=	ชอบปานกลาง	(Like moderately)
8=	ชอบมาก	(Like very much)
9=	ชอบมากที่สุด	(Like extremely)

JAR

1=	น้อยเกินไปมาก	(too low or too little)
2=	น้อยเกินไปปานกลาง	
3=	น้อยเกินไปเล็กน้อย	
4=	กำลังพอดี	(JAR)
5=	มากเกินไปเล็กน้อย	
6=	มากเกินไปปานกลาง	
7=	มากเกินไปมาก	(too high or too much)

Intensity scale



V. TEST ADMINISTRATION

A. LOGISTICS

Logistics do not much vary from recommended standard practices in other countries. Tests usually can be conducted in the morning from 9 a.m. to noon and in the afternoon from 2–8 p.m. depending on local conditions. Lunch is from 11:30 a.m. to around 1 p.m. and dinner is usually about 7:00 p.m., however, it can vary from family to family from 5:30 p.m. to 9 p.m. It may be quite difficult to do the test during those times.

Because of traffic and the casual, easy-going behavior of Thais, some people may not be on time if they think it is not essential. It is usual to be 15–20 minutes late for some types of appointments. However, many Thais are on time and present 10–15 minutes before the appointments. Thus, a flexible timetable between test sessions is recommended. Because product testing will not be considered as the primary task when participants have a conflict in their schedules, alternative test sessions should be available, especially when a person needs to test on consecutive days or weeks.

B. TEST ADMINISTRATION

Although many types of product tests can be conducted in a manner similar to other cultures, there are special considerations for preparing and serving food. Typically, Thai foods are precut into small pieces before cooking or serving. Cooking typically is done in woks or pots; ovens are rarely used and not common. Microwave ovens are becoming increasingly common in the upper socio-economic households, but are not widely used. Many potential test facilities do not have kitchens and portable heating units for tabletop cooking may need to be used. Spoons and forks are the only utensils usually used on the table. Chopsticks generally are used for noodle dishes and for Chinese and Japanese foods. Because knives would not be available at the table, samples should be precut into pieces and served with appropriate utensils.

C. PAYMENT/INCENTIVES

Money incentives are typical and similar to those offered in other countries. Note that even though average monthly income is low, the cost of living is still reasonably high and incentives should reflect that fact. However, the amount of the incentives is lower than in many western countries. One reasonably easy way to determine appropriate incentives for Thailand and many other countries is to decide what a similar test incentive in the U.S. would be and determine what that would purchase (e.g., how many fast-food meals, movie tickets, etc.). Then assume that the same number of meals or tickets would be purchased in Thailand and calculate the cost of those items. That incentive usually comes close to an appropriate amount. In addition to money, a gift or free products may be effective for students, children, company employees, or mall intercept consumers. It is essential that incentives be decided early so that they can be planned and be part of the screening process.

VI. REFERENCES

About Thailand, 2005, URL: <http://www.tourismthailand.org/home.php>, Tourism Authority of Thailand, Bangkok, Thailand, September.

At a Glance: Thailand, 2005, URL: http://www.unicef.org/infobycountry/Thailand_statistics.html, UNICEF, New York, NY, September.

Currency Converter, 2005, URL: www.x-rates.com/calculator.html, Forex Capital Markets, New York, NY, September.

Customs Department of the Kingdom of Thailand, 2005, URL: <http://www.customs.go.th/Customs-Eng/indexEng.jsp>, Customs Department, Bangkok, Thailand, September.

e Thailand Web Directory, 2005, URL: <http://www.ethailand.com/directory/>, eThailand.com Inc., September.

Internet Index of Thailand, 2005, URL: <http://iir.ngi.nectec.or.th>, Internet Information Research Center; National Electronics and Computer Technology Center, Pathumthani, Thailand, September.

Marketing and Promotion Specialists, 2005, http://www.thaiadvertising.com/thai/Mkt_specialists.htm, PCP Asia Ltd., Bangkok, Thailand, September.

Marketing Association of Thailand, 2005, URL: <http://www.marketingthai.or.th/>, Marketing Association of Thailand, Bangkok, Thailand, September.

Ministry of Commerce Home, 2005, URL: www.moc.go.th, Thailand Ministry of Commerce, Bangkok, Thailand, September.

Thai FDA, 2005, URL: www.fda.moph.go.th/enginfo.htm, Thailand Ministry of Public Health, Bangkok, Thailand, September.

Thailand Census-based Population Data, 2000, URL: <http://web.nso.go.th/eng/index.htm>, Thai National Statistical Office, Office of the Prime Minister, Bangkok, Thailand, September 2005.

Thailand Information, 2005, URL: <http://www.phrasebase.com/countries/Thailand.html>, Phrasebase, Sarasota, FL, September.

Yeh, L. L., Kim, K. O., Chompreeda, P., Rimkeeree, H., Yau, N. J. N., and Lundahl, D. S., (1998). Comparison in use of the 9-point Hedonic scale between American, Chinese, Koreans, and Thai. *Food Quality and Preference*, 9, 413–419.

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **UNITED KINGDOM**

Richard J. Marshall¹

I. INTRODUCTION

The UK is a multicultural society consisting of mainly Anglo-Saxon-European descendants with major Welsh, Scottish, Afro-Caribbean, Asian, and other European groups. There has been considerable mixing of cultures in many areas but also many ethnic groups wish to maintain their cultural heritage. This results in a majority who tend to be somewhat reticent in their attitudes overlaid by a still-strong element of class-consciousness. On the other hand, some of the ethnic groups can be very demonstrative and keen to participate in society. It is noticeable that even the traditionally reserved “Englishman” is now more likely to speak his, or her, mind.

The pressure of society and the articulation of the Protestant work ethic since the 1980s have brought about much of this change and people will declare that they have less time, or are less willing to give time, to answer questionnaires. In practice, people are usually quite cooperative and if they cannot spare the time, will very politely explain this to the researcher.

In certain areas, people will definitely not participate, seeing any inquiry into their personal life as an intrusion or even as a threat. This seems to occur mainly in areas where people have become alienated from mainstream society. Thus, any research should approach such areas with a high level of tact and be aware of such problematic cultural issues. A similar approach is needed where the culture of a particular ethnic group may restrict contacts with strangers. Such ethnic groups often have very strong religious beliefs and practices that must be respected.

There is also an increasing population aged over 50, those people born in the decades immediately following World War II. This generation was the flower children of the 1960s and it might be expected that as they come to retirement they will make their presence felt once again. They currently have significant consumer power.

Reference to professional organizations that provide specific services has been used in several places. This ASTM document does not endorse these companies.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

Any person likes to be approached courteously and will usually respond positively to the questioner. However, it is necessary to respect the range of cultural traditions. Many devout Christians still keep Sunday separate from the rest of the week and may resent any intrusion on that. Similarly, the Islamic and Jewish faiths have holy days as well as dietary restrictions. Thus not all products can be presented to all people and careful prior assessment of the target group is necessary to ensure that no offense is caused. Of course, many of these issues are found in other diverse cultures and are not unique to the UK.

Most people seem to react positively to most products but with such a diverse culture, there can be very differing views towards products. For example, there is a strong movement for organic foods such that supermarkets cannot meet the demand from home sources. This extends to a negative attitude towards intensive farming, use of pesticides, and the associated industries. However, such negative views are by no means general.

Most people in the UK are very tolerant of others’ opinions and there appears to be a trend for people to express their own opinions more clearly. That said, peer pressure still plays a very strong role in the

¹ *London Metropolitan University, Department of Health & Human Sciences, Holloway Road, London N7 8DB, United Kingdom*

formation of opinions and people will still very much go along with the crowd even if they do not hold the opinions or views.

Most people may be approached quite easily but there are some religious groups such as Moslems and Hindus where it is often not appropriate to approach women directly. Permission should be sought if there is any doubt about this.

Samples/stimuli can be shown/presented and evaluated by the intended user/participant other than under circumstances indicated previously. Many promotional campaigns are carried out on the basis of offering free samples to people with some follow-up to gather user data. Care and discretion would, of course, be needed with certain personal care products, contraceptives, etc.

In the UK, so much food is wasted that there is no significant problem if excess from an investigation has to be thrown away. Indeed, the food safety regulations demand that perishable food that has been at temperatures of greater than 5 °C or less than 65 °C for more than a very short time *must* be thrown

TABLE 1—*Public and religious holidays in the UK.*

Month	Holiday/Festival	Data/Day	Comments
January	New Year's Day	1 January	Moves to next weekday if 1st is Saturday or Sunday
March	St Patrick's Day	17 March	Northern Ireland only
March/April	Good Friday	Varies	Christian holiday
	Easter Monday	Varies	Christian holiday UK
May	Early May Holiday	First Monday in May	
	Spring Bank Holiday/Whit Monday	Last Monday in May	
August	Late Summer Bank Holiday	Last Monday in August	
December	Christmas Day	25 December	Moves to next weekday if 25th is Saturday or Sunday
	Boxing Day	26 December	Moves to next weekday if 26th is Saturday or Sunday

away. It should be thrown away in such a way that it cannot be found and consumed by any person.

2. Days to Avoid Testing

Apart from obvious religious holy days (Christian, Islamic, Jewish, Hindu, Buddhist, etc.) and public holidays, of which there are seven that fall on weekdays through the year, there are no particular restrictions on which days testing may be carried out.

Festivals and holy days for all faiths can be found at various web sites including <http://www.interfaithcalendar.org/>

3. Times of Day Most Appropriate for Testing

Testing may be carried out at any time of the day but the pattern of the working day means that people are more likely to be available from 9:30 a.m. to 4:00 p.m., especially for central location testing. During the morning and evening rush, it may be difficult to get sufficient numbers of participants unless some inducement is offered. Evening is generally not a good time for testing.

Typical times of day for meals are: breakfast 7–9 a.m., lunch (often called dinner) 12–1 p.m., tea or supper 5–7 p.m. The evening meal (dinner) may be taken at any time from 7 p.m. onwards, especially when eating out. During the day, people may have tea or coffee (both often with milk and sugar) at around 10:30–11 a.m. and 3–4 p.m.

B. POPULATION PROFILE

1. Demographic Information

The UK Government carries out a national census every ten years. The last was 2001 and full data are now available (<http://www.statistics.gov.uk/census2001/census2001.asp>). Statistics are also gathered between censuses.

UK Population:	Mid 2005
Males	29 479 200
Females	30 730 300
Total	60 209 500

(Office for National Statistics)

Ethnic groups (2001 data), %

White	91.9
Black Caribbean	1.30
Black African	0.8
Black other	0.2
Indian	1.8
Pakistani	1.3
Bangladeshi	0.5
Chinese	0.4
Other Asian	0.4
Other	0.4

(Office for National Statistics)

2. Economic Classes

3. Subcultures

Within the UK there are distinct cultural subgroups based on national identities (Scotland, Wales, Northern Ireland, and the County of Cornwall, which is rediscovering its Celtic identity), ethnic groups, and religious groups. These subgroups may cross over in various regions. There are also clear regional differences as indicated by Table 3. For example, in London, the east and southeast regions, there are higher percentages of social classes I and II and lower percentages of classes IV and V. Disposable income may be higher; expectations higher; and these affect purchase behavior, car use, etc. than in other regions.

Therefore, it may be necessary to carry out testing in several regions for nationally-used products. Testing may often be carried across one particular commercial TV region-there are fourteen regional commercial TV companies (see References and Bibliography).

4. Literacy Information

Complete literacy information is only available up to 1996 at present although there are data for specific sections, e.g., children for more recent years. Data are available from UK Office for National Statistics database (Dataset ST30319).

C. GOVERNMENT RELATED ISSUES

There are UK Government and EU regulations on the import of various materials such as meat, plants, and medicines. Where such materials, samples, prototypes are being used for “in-house” testing, details of commodity codes may be obtained from HM Revenue & Customs who will advise which government department is responsible for import licensing or controls. Other materials for research, prototypes, etc. may be imported if declared as being of “no commercial value” and are under £36 in value. Trading standards departments of local authorities should be able to advise on this. The Trade

TABLE 2—UK population by age: mid-2005. (Office for National Statistics).

Age Group	Males	Females	Total Pop.
Under 16	5 946 000	5 651 600	11 597 600
Under 18	6 764 600	6 424 200	13 188 800
16–44	12 124 700	12 100 200	24 224 900
45–64/59 ^a	7 265 000	5 878 100	13 143 200
65/60 and over ^a	4 143 400	7 100 400	11 243 800
90+	103 300	315 600	419 000

^aNormal UK retirement ages are 60 for women and 65 for men (this is under review), 65/60 and over group includes 90+ group.

TABLE 3—Social class based on occupation^a of working-age population, Spring 2002. Data from Labour Force Survey, Office for National Statistics and Department of Economic Development, Northern Ireland (<http://www.statistics.gov.uk/>).

	Social class (NS-SEC)								Percentages and thousands
	Higher managerial and professional occupations	Lower managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi Routine occupations	Routine occupations	Long term unemployed ^{b,c}	Total working-age population (=100 %) (thousands)
United Kingdom	10.2	21.9	10.4	7.3	9.6	13.0	10.2	17.5	36,998
North East	6.9	18.8	9.6	4.7	10.7	16.1	12.8	20.6	1,574
North West	8.2	19.8	11.2	6.7	9.8	14.4	10.6	19.2	4,222
Yorkshire and the Humber	8.1	20.0	9.3	6.4	10.6	15.0	12.4	18.1	3,110
East Midlands	9.1	19.8	9.1	7.6	11.2	13.6	13.0	16.6	2,609
West Midlands	8.9	20.4	10.3	6.6	10.7	14.8	11.2	17.1	3,243
East of England	11.4	23.3	11.9	8.4	10.0	13.1	9.0	12.8	3,377
London	14.0	24.6	10.4	6.9	6.1	9.7	6.7	21.5	4,882
South East	14.2	25.6	11.1	8.1	8.5	11.0	7.8	13.7	5,005
South West	9.5	23.1	10.1	9.8	10.8	12.8	9.6	14.2	3,001
England	10.6	22.2	10.5	7.4	9.5	12.9	9.8	17.0	31,023
Wales	7.0	19.1	8.1	7.6	11.2	14.5	11.3	21.1	1,770
Scotland	9.1	20.8	11.1	5.7	10.1	12.7	12.0	18.5	3,170
Northern Ireland	6.9	19.5	8.3	7.8	8.6	12.8	11.9	24.2	1,035

^aBased on the new National Statistics Socio-economic Classification (NS-SEC), which is used in place of Social Class (SC) and Socio-economic Group (SEG).

^bMen aged 16–64 and women aged 16–59.

^cIncludes those who have never worked.

For definitions of occupations, see Labour Forces Survey:<http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=5983&More=Y>.

Missions in UK Embassies should be able give advice about departments to contact before attempting to import.

D. MEASUREMENT SYSTEM AND CURRENCY

The official system of measurement in the UK is the Metric System and most people are familiar with kilograms or 'kilos,' metres, centimetres, and millimetres, litres and millilitres. However, there are some specific exceptions. The measure of distance for travel is the mile and yards, feet and inches still have general usage. Petrol (gas) is sold in litres but beer is sold in pints (NB this is the Imperial Pint with eight to the Imperial Gallon). Although it is illegal to sell goods by Imperial Measure, many older people still use pounds and ounces. Speed limits on roads are in miles per hour (and we drive on the left). Temperatures are normally expressed in degrees Celsius but the Fahrenheit scale is still used, particularly by older people.

The currency in the UK is the Pound Sterling, with the symbol £ preceding the value.

E. USE OF THE INTERNET IN CONSUMER TESTING

The Internet is very widely available and widely used. Many people have broadband connections at home as well as at work. A number of market research companies now offer an Internet-based testing service for clients and this is increasing rapidly (Westlake et al. 2001).

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

As indicated above, HM Revenue & Customs are initially responsible for approving the import of all goods into the UK and demanding any taxes. The UK, being a member of the European Union, has to conform to EU regulations and local regulations as well.

The importer of the goods is responsible for following the required procedures: Within three hours of unloading, goods must be presented to the Revenue & Customs office at the port either by lodging form C1600A with the Customs office or by using an approved computerized inventory system. At the same time, a summary declaration must be made on form C1600 that identifies the goods or bills of lading; manifests, etc. may be accepted if they contain the necessary details.

Charges may be payable on certain goods at the time of import or by other approved arrangements.

Detailed information may be obtained from UK Revenue & Customs which has offices for each region in the UK.

Central Region

IT Written Enquiries Team
Bowman House
100–102 Talbot Street
Nottingham, NG1 5NF

London and South Region

IT Written Enquiries Team
Eldon Court
75 London Road
Reading, Berkshire, RG1 5BS

Northern Ireland

IT Written Enquiries Team
National Advice Service
Dobson House, Regent Centre
Gosforth, Newcastle Upon Tyne, NE3 3PF

North Region

IT Written Enquiries Team
NAS Cheadle, Boundary House
Cheadle Point
Cheadle, Cheshire, SK8 2JZ

Scotland

IT Written Enquiries Team
Portcullis House
21 India Street
Glasgow, G2 4PZ

Wales

IT Written Enquiries Team
National Advice Service
Portcullis House
21 Cowbridge Road East
Cardiff, CF11 9SS

Details can be found on the HM Revenue & Customs web pages.

For an excellent overview, the U.S. Embassy has good advice on the Department of Agriculture web pages.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Generally speaking, the climate poses no major problems of storage of samples other than the normal refrigeration of perishables. It should be noted that during the summer months, outside temperature may reach the mid to upper 20°s C (and even into the 30s) and many buildings are not air-conditioned.

C. SELECTION OF TEST SITE/FACILITIES

Testing may be carried out in most areas provided permission has been sought from the owner/leaseholder. Many open spaces that seem to be public spaces are actually privately owned and permission will be needed.

Local managers of premises should be able to advise on whom to contact if they themselves cannot give

permission. Local authorities (Councils) own significant areas within towns and should be approached in these cases. They may also be able to advise on the ownership of premises, etc., where they are the rating authority. Contact names, addresses, and phone numbers are most easily available on the Web at “UK Local Government Web Sites in England and Wales,” “Local Government Web Sites in Scotland and Northern Ireland,” and “Local Government Web Sites in London.”

D. RECRUITMENT OF PARTICIPANTS

1. Panelists may be recruited by a variety of means; advertisement in the local press seems to be quite effective as does word of mouth via existing panelists. Copies of the Electoral Register can be viewed at Council offices or libraries, or both, and this is often used as a way of identifying potential subjects. However, a restricted version of the Electoral Register has been introduced following recent legislation and this is available for commercial use. Citizens can choose to keep their details out of this list. Such lists are often used in conjunction with other data on consumer lifestyles collected by postal questionnaire. Various marketing organizations can supply such data. For example, product and consumer information can be obtained from Mintel International Group Ltd.
2. Contacting participants
Participants may be contacted in a variety of ways: cold telephone calls (may not be appreciated on weekends or evenings), approached in the street, door-to-door, etc.
3. Who to contact
Except in some ethnic and religious groups, any member of the family may be contacted, although minors (under 18 years) must be contacted through a parent or guardian.
4. Groups
Recruitment can be completed by contacting individuals but there may be cases where particular groups would have to be contacted. For example, older subjects might be recruited through day centers where they meet for socializing and meals. Children could be contacted through the managers of schools, playgroups, etc.
5. Approval
Provided local authorities, owners, managers, etc., have been asked and they have given permission, there is no central requirement to notify any government department other than indicated above in the case of importing certain items.
6. Required consents
Consent will be required where children are to be the subjects—and this has to be obtained not only from the school but also from parents. While street traders are required to be licensed, there is no similar requirement for researchers; however, it would be courteous to check with a local authority in case there are any local by-laws.
7. Testing specific subcultures
Most large cities in England have sizeable populations of the various ethnic subcultures, especially London, Birmingham, Bristol, Southampton, Liverpool, and Leeds. For Welsh people, the biggest cities in Wales are Cardiff and Swansea. There are other major towns but there are significant cultural differences between North and South Wales. In Scotland the main cities are Edinburgh, Glasgow, Perth, and Aberdeen, but there are other important towns as well. There are some cultural differences between the south and north of Scotland. In Northern Ireland, they have strong religious beliefs, both Protestant and Catholic, and there are distinct cultural differences between some parts of these groups. In Belfast, the different religious groups tend to live in different parts of the city.

E. OTHER DESIGN/PLANNING ISSUES

Where testing is in central urban areas, there may be problems with transport. Many urban roads, motorways and public transport get heavily congested in the morning (07.00–09.30 approx.) and evening (16.00–19.00 approx.) leading to lengthy delays. The M25 motorway that circles London can be especially slow. Rail transport can be very efficient but the network is stretched to maximum during peak times. There are a number of regional airports and the flights between them, and to/from continental European airports, are quite good. Thus careful planning is necessary to allow adequate time to transport materials and personnel.

For central location testing, there is a wide range of premises that may be used. These include public halls, meeting rooms in council premises, cinemas, church halls, and even churches themselves. Access to these may not always be easy and careful planning will be needed if delivery of large items is necessary. There can be strict enforcement of parking and delivery times on main streets. The UK has a different standard for electrical power sockets and plugs from the rest of Europe. Standard three pin plugs have three rectangular pins and are fused, with a maximum rating of 13 amps; the standard mains voltage is 230 V. Planners will need to ensure that power points are in suitable locations and in sufficient numbers for the intended equipment.

Central location testing is usually carried out between 9:30 a.m. and 4:00 p.m. The cost of testing in the evening can be quite high and it may be difficult to find sufficient volunteers.

For food-related testing, the Campden & Chorleywood Food Research Association and Leatherhead Food International can provide support, advice, and facilities.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

1. Literacy Information

While the general level of literacy is satisfactory there are some areas where it can be limited, for example, young children, recent immigrants whose language is not English, some inner-city areas. The government is determined to improve literacy through the education system so that this problem should decrease with time.

2. Primary Language

The primary language is English.

3. Other Dialects/Languages

Across the English-speaking areas, there are distinct regional dialects and accents. In various English regions and in Scotland, Wales, and Northern Ireland, accents may be particularly strong and may be difficult for researchers to understand. There are also regional differences in the use of English and local words. In Scotland and Wales significant numbers of people speak Gaelic and Welsh. Ethnic populations speak various Asian (Arabic, Hindi, Gujarati, Chinese, etc.) languages and older members of households may not be very fluent in English. The choice of language for questionnaires depends very much on the locale where testing is to be carried out.

B. QUESTIONNAIRE SCALES

1. General Issues

Normal horizontal scales are generally quite acceptable.

The concept of scaling is understood by most of the population but there may be odd occasions where it is not.

Wording should be appropriate to the subject group with pictures used with young children. Otherwise no special wording would appear to be needed.

No special instructions are needed other than in the contexts indicated above.

There are no special issues to be considered in questionnaire design.

While some people may say that the number 7 is lucky and 13 unlucky, there is no general restriction on numbering, colors, and shapes that may be used.

2. Scales to Avoid

There are no particular scales that should be avoided.

3. Recommended Scales

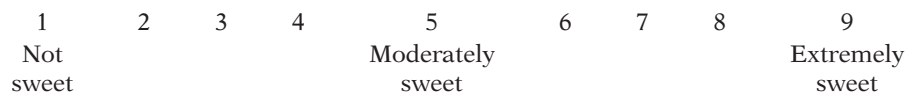
All types of scales have been and can be used. The standard 9-point hedonic scale (Peryam and Swartz 1950) is well understood as is the 5-point version.

9-point hedonic scale:

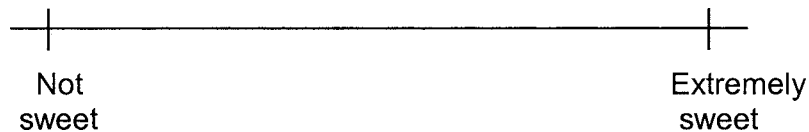
9	Like extremely
8	Like very much
7	Like moderately
6	Like slightly
5	Neither like nor dislike
4	Dislike slightly
3	Dislike moderately
2	Dislike very much
1	Dislike extremely

Attribute scales can be used in both numerical and unstructured line scale forms:

Attribute scale for sweetness



Line scale for sweetness (typical overall length 120 mm, anchors normally 10 mm from ends)



Line scales are also generalized (where a number of attributes are assessed against the same scale) by marking the anchors “Low” and “High” or “Weak” and “Strong,” etc.

Such scales are often used with free choice profiling methods.

V. TEST ADMINISTRATION

A. LOGISTICS

As indicated previously, there are few constraints on the timing of testing other than perhaps during morning and evening rush hours and at weekends at home. People may be approached in the street at most times of the day while shopping.

Smoking and chewing of gum by researchers may be particularly offensive to some groups; wearing of modest clothing could also be an issue with some.

There are no special warm-up or welcoming procedures needed or expected apart from common courtesies (“Hello. I’m XY and I’m carrying out an investigation into...I wonder if you could spare a few minutes...”).

Halal or kosher food may be necessary in particular situations.

Samples should be served following standard testing protocols. This includes hygienic preparation and handling of food samples. The British Market Research Association and the Consumer & Sensory Research Group of the Society of Chemical Industry have published a Code of Practice for consumer testing.

No special product information is required for the participant; however, information may be volunteered if this would aid testing.

B. TEST ADMINISTRATOR

Generally, there are no restrictions on who should or should not run testing although it is a legal requirement that those working with children have been screened for any convictions for child-related offenses. It may also be necessary to avoid using men in the presence of women in some ethnic groups and women are not always accepted into households unaccompanied by a male.

C. PAYMENT/INCENTIVES

A wide variety of payment incentives have proved to be acceptable. These range from hourly pay for “professional panels” to payment in kind, i.e., free samples, gifts, and gift vouchers.

Such payments should normally be made to the participants themselves. Campden & Chorleywood Food Research Association, Leatherhead Food International, and the Market Research Society should be able to advise on the adequate incentive type and amount.

VI. REFERENCES AND BIBLIOGRAPHY

- British Market Research Association, Secretariat, Devonshire House, 60 Goswell Road, London EC1M 7AD, UK www.bmra.org.uk/index.html
- Campden & Chorleywood Food Research Association, Chipping Campden, Gloucestershire, GL55 6LD, UK. Tel: +44(0) 1386 842000 Fax: +44 (0) 1386 842100 (www.campden.co.uk)
- Currency conversion rates: www.x-rates.com/calculator.html
- Festivals and holy days for all faiths: www.interfaithcalendar.org/2005.htm
- Leatherhead Food International, Randalls Road, Leatherhead, Surrey KT22 7RY UK Tel: +44 (0) 1372 376761 Fax: +44 (0) 1372 386228 (www.lfra.co.uk)
- Market Research Society, 2004, *The Research Buyer's Guide: UK and Ireland*, London: The Market Research Society
- Mintel International Group, Ltd., 18-19 Long Lane, London EC1A 9PL. Phone: +44 (0)20 7606 4533. (www.mintel.com/)
- Office for National Statistics, UK, 2005 *Social Trends*. Basingstoke: Palgrave Macmillan
- Office for National Statistics, UK, (2005) UK 2005: *The Official Yearbook of the United Kingdom of Great Britain and Northern Ireland*, Basingstoke: Palgrave Macmillan
- Office for National Statistics web site: www.statistics.gov.uk/default.asp
- Peryam D. R. and Swartz, V. W., (1950). Measurement of sensory differences. *Food Technology*, 4, 390-395
- Society of Chemical Industry, 14/15 Belgrave Square, London SW1X 8PS, UK. sci.mond.org/
- Mort, D., Siddall, L., and Wilkins, W. Eds., 2002, *Sources of Nonofficial UK Statistics*, Aldershot: Gower Publishing
- TV regions (commercial network): <http://www.itvregions.com/>
- UK Local Government web sites: England and Wales: www.gwydir.demon.co.uk/uklocalgov/localgov.htm, Scotland and Northern Ireland: www.gwydir.demon.co.uk/uklocalgov/localgsi.htm, London: www.gwydir.demon.co.uk/uklocalgov/localld.htm
- UK Revenue and Customs customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pagelmpoort_ShowContent&id=HMCE_CL_000279&propertyType=document
- U.S. Embassy, Department of Agriculture: www.usembassy.org.uk/fas/import_procedures.htm
- Westlake, A., Sykes, W., Manners, T., and Rigg, M., (Eds.) (2001). "The Challenge of the Internet." *Proceedings of the 2nd Association for Survey Computing International Conference of Survey Research Methods*, Chesham: Association for Survey Computing

INTERNATIONAL CONSUMER PRODUCT TESTING ACROSS CULTURES AND COUNTRIES: **UNITED STATES**

Sheryl Karow,¹ Bree Klawien,² and Leisa Lessard²

I. INTRODUCTION

All comments regarding the United States consumer and culture will be representative of a range of customs, habits, and underlying implicit values for the culture. This document is being written for use with all consumer products.

To conduct successful quantitative and qualitative consumer research in the United States, you must know your test objective, who you want to survey, length of the interview, and testing requirements. Initially, a proposal should be submitted to several research vendors for costing and timing projections. The preliminary vendor proposal should include seven main items—screening requirements, test type and design, length of interview, incidence, list of test cities, product storage requirements, questionnaire details, facility and timing requirements, and services required.

Knowing what services each vendor provides will help manage time and money when preparing for consumer research. There are three types of research vendors—field services only, consumer-testing facilities that outsource the field, and full-service consumer testing facilities with field services.

The screening requirements are essential for recruiting the right consumer to test the product. The more specific the screening requirements, the lower the incidence (% out of 100 contacted who qualify). For example, at a 10 % incidence, it will take five times longer to recruit qualified respondents than at a 50 % incidence and would also cost proportionally more. This time difference must be accounted for when determining the project timing and ultimate cost of the project.

The type of test and test design will vary depending on your test objective and monetary funds available. Prerecruiting respondents over the telephone to participate in a CLT is more expensive than a mall recruit.

The incentive or amount a person is paid for participating is typically dependent on the length of the interview and the incidence of finding a qualified respondent. The longer the interview and the lower the incidence the more the project will cost.

It is important that for national introductions, products are tested in the northeast, midwest, south and west to cover any regional preferences that may occur. Both the northeast and west tend to have higher testing costs than either the midwest or south.

II. PRELIMINARY ISSUES

A. CUSTOMS

1. General Issues

As with many cultures in the United States, there is an underlying desire to please interviewers, moderators, and test administrators. In the United States, motivation is the underlying basis for most activities. These activities range from work to social and entertainment diversions. Motivation is a strong factor that influences a participant's responses in any given test situation. An interested participant will contribute more reliable responses than one that is not.

2. Days to Avoid Testing

In the United States, testing can take place seven days a week. It is recommended that qualitative testing be conducted Monday through Saturday, while quantitative testing and home use tests can be conducted seven days a week. Placement of any type of tests just prior to or on major holidays such as Thanksgiving, Christmas, etc., or major sporting/entertainment events should be avoided due to lack

¹ *Kerry Ingredients, 200 West Grand Avenue, Beloit, WI 53511*

² *Cunningham Research Group, Inc., 3 Signal Avenue, Ormond Beach, FL 32174*

of available participants. Local school vacations/holidays may also impact responses. With over 90 % of the population holding some form of religious belief, there are certain religious holidays where testing should be avoided. Check with your local supplier on days they would recommend. These may include but are not limited to:

- Ash Wednesday—40 days before Palm Sunday (Christian)
- Good Friday—Friday prior to Easter Sunday (Christian)
- Palm Sunday—Sunday prior to Easter Sunday (Christian)
- Passover—occurs in March or April, date changes according to the Jewish Calendar (Judaism)
- Easter Sunday—(Christian)
- Rosh Hashanah—occurs in September or October, date changes according to the Jewish calendar (Judaism)
- Yom Kippur—occurs in September or October, date changes according to the Jewish calendar (Judaism)
- Ramadan (month of fasting)—occurs late November to late December according to moon (Islamic)
- Hanukkah (Judaism)
- Christmas—December 25th (Christian). Typically, testing in mid-November through December may be more difficult, costly, and require more time to conduct studies due to the distractions of the holiday season. This will be dependent on the ethnicity in the area of testing.
- In addition to religious holidays, many Americans enjoy the following National holidays (New Year's Day—January 1st; Memorial Day—last Monday of May; Independence Day—July 4th; and Thanksgiving—4th Thursday of November). During these holiday weekends, most testing agencies provide limited testing during this time.

Additionally, education systems observe breaks/days off that are in addition to the above listed holidays.

3. Times of the Day Most Appropriate for Testing

It is desirable to test products at times when the product is normally consumed, but it may not be possible. Typically in the United States, breakfast is consumed between 6:00–10:00 a.m., lunch from 11:00–2:00 p.m. and dinner roughly 4:00–9:00 p.m.

Because of the fast-paced lifestyles of people in the United States, many participants who work outside the home prefer to attend test sessions before work, at lunch, or immediately after the end of the workday (5:00 to 7:00 p.m.). Other participants may be available during the day, such as stay-at-home parents; however, many need to be home by 3:00 p.m.; that is the time that many children come home from school. Panelists should be aware of the time commitment necessary to complete the test and this should be made clear at the recruitment stage.

Alcohol testing is time dependent on individual state regulations and setting (public bar or pub versus private, closed party). Laws regulating consumption of alcohol may prevent testing in various public places. If alcohol testing is conducted it is normally scheduled after 12:00 noon.

B. POPULATION PROFILE

1. Demographic Information

The United States is recognized as the third largest country in the world with a population of over 281 million people, according to the U.S. Census Bureau in 2000. The southern region of the country makes up about 36 % of the total U.S. population, followed by the midwest, west and northeast regions. Looking at the percent change in resident population for the 50 states from 1990 to 2000, it is obvious that the present population distribution is changing. The midwest and northeast regions of the U.S. were considerably below the average change of 12.6 % for the country. The west enjoyed steady growth and remains the largest population center; however, the south is rapidly gaining.

The majority of Americans reside in urban communities, leaving only 25 % of the country occupying rural areas. The largest urban area in the U.S. is New York City. New estimates put this city's population at 8 million people as of the year 2000. Los Angeles is the second largest populated area, with a population of 3.5 million. Succeeding New York and Los Angeles' population are Chicago, Houston, Philadelphia, San Diego, Phoenix, and San Antonio.

2. Economic Classes

An economic class still exists in the United States and is noted by financial status, wealth, or income. These classes are divided into several categories: upper class, upper-middle class, middle class, lower

or working class, and poor. Approximately 5 % of all full-time workers have a household income over \$75 000. This group would be considered upper-class. Conversely, almost 20 % of all full-time workers have a household income under \$12 500, considered lower class. Another large percentage are those individuals who earn between \$12 500 and \$30 000, who account for the largest percentage (35 %) are considered lower to middle class (all of the above percentages and incomes were as of the year 2000). Depending on the product of interest, it may be advisable to incorporate income restrictions in the screening process. This will ensure that the target market is being reached.

3. Subcultures

Persons who are either foreign born or first-generation Americans tend to be more geographically concentrated than the native population.

(a) Ethnic

Utilizing information from the population division of the U.S. Census Bureau, a state-by-state comparison can be made in the growth rate of the selected populations from census 1990 to 2000. Highlights on this information are presented in the bullets below (Note: This is intended as an example and may become quickly outdated).

Hispanic population

- Top five states with the most persons of Hispanic origin: California, Texas, New York, Florida, and Illinois.
- With the exception of New York, all of the top five states saw a growth rate in the total Hispanic population of 36 % or greater from 1990 to 2000.
- Six U.S. states saw greater than 100 % growth in the Hispanic population from 1990 to 2000. Those six states are: Nevada (145 %) Georgia (120 %), North Carolina (129 %), Nebraska (108 %), Tennessee (105 %), and Arkansas (170 %).
- Every state saw some growth in the Hispanic population.

Asian and Pacific Islander

- Top five states with the most persons of Asian or Pacific Islander origin: California, New York, Hawaii, Texas, and New Jersey.
- No state has negative growth in their Asian population.
- Two states had a growth rate of over 100 % from 1990 to 2000: Georgia (109 %) and Nevada (124 %).

Caucasian population

- Top five states with the most persons of Caucasian origin: California, Texas, New York, Florida, and Pennsylvania.
- Negative growth in six states including two of the top five states: New York and Pennsylvania.
- Highest growth was seen in Arizona (29 %) and Nevada (46 %).

African American population

- Top five states with the most persons of African American origin: New York, California, Texas, Florida, and Georgia.
- Negative growth in two states: District of Columbia (-21 %) and West Virginia (-0.5 %).
- Highest growth in Idaho (115 %) and Nevada (75 %).

(b) Age

As of the year 2000, the population of the United States is not balanced across the ages. The largest group of Americans, about 77 million, is between the ages of 35 and 53 years old. The middle sector, consisting of people aged 23 to 34, numbers about 45 million. The youngest group of Americans is approximately 72 million strong and includes people between the ages of 5 and 22.

The aging of the Baby Boomer generation (a person born between 1946 and 1965) has caused rapid growth in the numbers of elderly Americans. This growth is expected to continue beyond the Baby Boomer generation as advances in health care and living standards push the life expectancy up for all generations. Today's youth can expect an average life span of 90+ years. That is almost 20 years higher than their grandparent's generation, and means that this group's demand for consumer goods will be much higher than that of their parent's.

(c) Religion

Although there is no official religion in the United States, the majority of Americans are Christians. The two most significant denominations within this group are Roman Catholics, with over 100 million members and Protestants, with around 99 million. Other significant religious groups in

the United States include followers of Judaism (1.8 % of the population), the Latter-day Saints or Mormons (1.4 %), and the Jehovah's Witness (0.8 %). There is also a large portion of Americans who do not hold any type of religious belief (7.1 %). They are referred to as "nonreligious" and include those professing no religion, agnostics, nonbelievers, and freethinkers.

4. Education

Recent survey results indicate that education levels in the United States have increased slightly in the past decade. The table below indicates the percentage of the total population (all races and genders) that has attained a certain level of education (U.S. Consensus Bureau 2000).

All races and genders age 18 years or older (United States)	Percentage of U.S. Population
Do not have High School Diploma	17 %
Have High School Diploma or greater	83 %
Have Bachelors Degree or greater	23 %

A majority of questionnaires and ballots, either paper-based or computer, require that the respondent be able to read the written English language. When designing these study materials, it should be noted that approximately 20 % of the adult population reads at or below a fifth-grade level. Another 15 % of Americans age 16 years or older have significant literacy needs, and may not be able to read or understand, or both, the average survey instrument.

5. Literacy/Computer Literacy

America has entered the Information Age leading to an increase in Internet and computer-based interviewing. This is assured by increased access to, and knowledge of, computers in the American public.

In 1984 only 8 % of American households owned a home computer. In 2001 that figure is over 56 %. Access to and use of computers in the workplace and schools has also increased. Sixty percent of American adults say that they regularly use a computer in their work. The next generation of adults will be even more computer literate as 84.5 % of U.S. schools have computers available for student use.

Caution is advised when considering a computer or Internet-based approach to consumer testing. There is a firm 20 % of the population that indicate they have no interest in computers or the Internet. A large part of this group is the elderly population, of whom only 10 % own a home computer. The remainder of the group is made up of average Americans that simply refuse to learn and use computers or the Internet.

A significant impact on American literacy is the influx of immigrants into the country. There are an estimated 14 million adults living in the U.S. who have not achieved fluency in English. When designing and conducting consumer testing it is recommended that only literate individuals be recruited unless arrangements have been made to have trained interviewers available to read the questionnaire or concepts to them. It is suggested that interviews be conducted in English or in their native languages.

There remains today a gap between persons of differing ethnic origins in the United States not only in population and income, but also in education. Hispanics as a whole are lagging somewhat behind the African American and Caucasian populations. Forty-three percent of Hispanics do not have a high school diploma or equivalent, as compared to 17 % in the general population. Additional statistics show that 57 % of Hispanics have completed high school and only 9 % have a bachelors degree or greater. The rapid growth of the Hispanic population is largely the cause for the lower percentages. As larger numbers of Hispanics become second and third generation Americans, that gap can be expected to narrow.

C. GOVERNMENT RELATED ISSUES

Most U.S. shipping companies can be used to transport product for testing. If the product is perishable, the research vendor must contact the individual shipping vendor to obtain any special instructions before transport. If sensitive products such as alcohol are being transported, the state of origin and destination must be contacted to obtain proper state and local regulations.

1. Alcohol or Tobacco, or Both

Testing of products should be done at times appropriate to normal consumption. A designated driver or prearranged transportation is suggested, as well as food for the participant. A signed consent form is required and no walk-ins are allowed. All government regulations for that state must be followed; in some states a licensed bartender may be required to pour and dispense samples. Written permission must be granted at the local, state, or federal level.

There are many federal, state, and local regulations that must be followed in alcohol or tobacco testing. These regulations control how and where the product is transported, amount that can be tested in a sitting, consent forms, who can test (not pregnant or lactating females, etc.). Contact the state or federal departments of Alcohol, Firearms and Tobacco for further regulations (e.g., amount that can be served in a sitting, blood alcohol levels, etc.).

To ship alcohol/tobacco into/within the United States will involve contacting a wholesaler familiar with accepting products through customs. The wholesaler needs to contact the port of entry and will be responsible for accepting the product into the United States. The company verifies the paperwork (e.g., bill of lading, point of entry paperwork) and will then notify the shipper about shipping dates. Additional paperwork will be required in order to send the product to a local distribution center. Costs are incurred throughout the shipping process. When sending alcohol, it is necessary to include the number of bottles you are sending, proof by volume, bottle size, etc.

2. Other Products

Other governmental agencies regulate the shipping and receiving of products between states and between countries. The USDA, FDA, and Animal and Plant health inspection services are a few of the agencies that regulate product production, alcohol or tobacco, sanitation, transportation, etc. General information numbers for these regulatory organizations are listed below:

USDA: 202-720-2791

Food and Drug Administration (FDA): 888-463-6332

Bureau of Alcohol, Drugs and Firearms: 621-726-0200

D. MEASUREMENT SYSTEM AND CURRENCY

- The pound is the measurement system used in the United States. The basic measurements are: pounds (weight), inches/feet/yards (length), and cups/gallons (volume). Temperature is measured in Fahrenheit (°F). Americans are not familiar with metric units such as grams, metres, or litres and therefore these units are not appropriate.
- Currency used in the United States is the dollar. For currency conversion, see <http://www.x-rates.com/calculator.html>

E. USE OF INTERNET IN CONSUMER TESTING

In the United States, the Internet is often used to help recruit and screen panelists. A notice is sent to a list of predefined panelists asking him/her to go to a specific website and answer a brief questionnaire. The questionnaire automatically eliminates nonqualified panelists as they answer the questionnaire. A qualified respondent is then instructed how to participate in the survey.

The Internet is a valuable survey tool for simple surveys. They are best used to collect consumer's responses on short surveys (less than 10–15 minutes). Advantages of Internet surveys include: consumers can participate at their convenience—any time of day or night or any place there is a computer; responses are completed in privacy (no interviewer asking questions), ability to quickly survey a large number of people from all over the United States, low cost/survey costs, etc. Home use product tests are an excellent use of Internet surveys.

Disadvantages of the Internet include: participants who are not representative of the total population (older age groups and ethnic groups are not as computer literate or have limited access to a computer), probing is not possible, consumers become bored quickly and may not complete the survey. The Internet survey should be short, nonrepetitive, and make the consumer feel like their answers are important.

A third Internet survey method includes conducting focus groups on-line or within a chat-room setting. These methods are becoming more popular since they allow the consumer to participate at their own convenience. Plus, the methods permit the moderator to clarify answers and ask questions that are more open-ended. Concerns listed in the section above are still applicable.

Panelist's names can either be purchased from a sampling house, full-service supplier, or can be from

your own database of consumers. Each sampling method has its own issues and should be discussed with your supplier.

III. TEST DESIGN/PLANNING

A. PRODUCT SHIPMENT

The United States infrastructure is well developed so shipments of product to testing sites are routinely received the next day or second day by any of the major shipping companies. Any product can be tracked via the Internet or telephone communication and monitored throughout the shipping process to ensure prompt delivery.

Extra time should be considered during the winter months for the midwest and east coast due to weather delays.

B. SAMPLE STORAGE CONDITIONS AND REQUIREMENTS

Geographically, the western part of the United States is hot and dry while the midwest and eastern portions are hot and humid in the summer. Proper packing of product is essential to protect against the varying weather regions. Products that need to be kept cold (summer months) should be packed or stored in coolers that have self-contained ice packs so as not to cross contaminate the product being shipped. The same precautions must be taken if the product is to be kept warm during the winter months. Special arrangements need to be made with the courier if sensitive materials or materials that are a potential shipping hazard are being shipped.

C. SELECTION OF TEST SITE/FACILITIES

There are known regional preferences in the United States. Therefore, it is important that you consider testing in at least four geographic areas. The United States has a well-organized network of field services with several companies having 50 or more testing locations. This makes fielding projects easy because only one contact is needed to cover many different areas of the country. The following organizations provide names of services (field services+suppliers) that have consumer-testing capabilities:

- Marketing Research Association's "blue book" specializes in providing a comprehensive reference for professionals who purchase consumer and opinion research services. The book lists field service companies, mall versus prerecruit capabilities, number of computers/facility, moderators and focus group facilities, etc. This is the most detailed directory available and it is easy to use. An on-line version of the Blue Book can be found at www.mra-net.org.
- American Marketing Association has a marketing services directory available that lists both suppliers (e.g., full-service companies which subcontract to a field service for market research) and some field services (e.g., companies that actually do the testing with consumers). This directory can be found at www.ama.org (bookstore→directories).
- Qualitative Research Consultants Association specializes in focus group moderators and focus group facilities www.qrca.org

When selecting cities to conduct studies, ask the agency for recommendations. Not all offices within a field service have the same quality standard levels.

It should be noted that many field services do not have ovens/stoves, refrigerators, freezers, pots/pans, microwave ovens, toasters, etc., or even multiples of an item. It is important to clarify all of your equipment and product storage requirements prior to contracting a facility.

D. RECRUITMENT OF PARTICIPANTS

In the United States, mall intercepts are widely used to conduct studies but there are many different methods (mail, Internet, prerecruit from large databases, groups such as schools, church groups, etc.).

There are four different time zones in the continental United States. Each test site must be cognizant of the time zones when conducting interviews or recruiting across geographical areas.

Example:

10:00 a.m. Pacific Standard time = 11:00 a.m. Mountain Standard time = 12:00 noon. Central Standard time = 1:00 p.m. Eastern Standard time.

Federal regulations restrict outbound telephone calls to person's residence at any time other than between 8:00 a.m. and 9:00 p.m. local time at the called person's location.

For children's studies, testing off-site is common. In this case, the research vendor might conduct a test at a school or other central location. Unlike other countries where the use of schools is difficult, testing with children in schools in the U.S. is conducted quite often. It is important for the research vendor to receive permission from the school and parent before testing. See ASTM standard guide on testing with children for other specifics.

All studies that are conducted through an outside research facility require a consent form. These forms notify the panelists of the objective, general information, and the qualifications of the study such as: his/her participation is entirely voluntary; he/she may decide not to participate or to withdraw from the study at any time without penalty; they have no known food allergies, etc. When children are involved a parent must co-sign the consent acknowledging they have allowed their child to participate and informed the child of their rights.

E. OTHER DESIGN/PLANNING ISSUES

The United States' fast-paced culture is based on scheduling and keeping appointments. Many doctor's offices require 24-hour notice be given if a person cannot keep an appointment. While consumer research is not in the same realm as a doctor visit, the same courtesy is requested when participating in consumer research tests. Every effort should be made by the research vendor to stress the importance of keeping the appointment even if the participant is late. In the event that weather or heavy traffic becomes a factor, over-recruiting is usually recommended.

Consumer research can be accomplished with a number of techniques, including qualitative (e.g., in-depth interviews, focus groups), or quantitative (e.g., paper, diaries, or computer questionnaires) techniques, based on the test objective. Direct contact with respondents has the benefit of the added probing or clarification of answers given by the participant and should be dependent on the test design. Drawbacks include interviewer influences on the participant as well as difficulty in returning to previously asked questions or misunderstanding of a question by the participant.

In the United States, people are accustomed to impersonal contacts (e.g., automatic teller machines, self-serve conveniences). The type of test administration used will depend on the objectives of the study, reading skills, and in-depth probing of comments. Self-administered interviews result in more honest responses but literacy levels will vary from participant to participant so questions may be misunderstood. Clear, simple language should be used to minimize this problem. Interview administered costs are higher than self-administered interviews. When using the self-administered method, all instructions and orientation materials need to be carefully reviewed by recruiters, interviewers, etc., to be sure all aspects of the study are easily understood by the participants.

The value of computerized and Internet data collection needs further study and will vary with the participant's level of perceived "intimacy" or "direct contact," as well as convenience. In the United States, computer surveys are viewed as more fun and participants tend to be more honest in their responses because of the anonymity. They also feel the interview is completed in less time than with a self-administered questionnaire.

IV. QUESTIONNAIRE ISSUES

A. LANGUAGE

The National Literacy Act defines literacy as "an individual's ability to read, write and speak English." The official language in the United States is English. During the execution of a research study, it is not routine to ask individuals if they can read, write, and speak English. Therefore, it is up to the interviewer to decide to continue with a nonreader or conduct an interviewer-administered study. If the test design is self-administered, it is usually commonplace to turn away the consumer. If the design is interviewer-administered, the interview may proceed with the use of trained interviewers. If researchers are purely interested in the opinions of literate consumers, it is acceptable to ask during the screening process what was the highest level of education completed or can the participant easily read a newspaper.

B. QUESTIONNAIRE SCALES

1. General Issues

Most consumer research utilizes written materials. A growing trend is the use of computerized interviewing. One-on-one interviews may also be used. Language is read from left to right and both horizontal and vertical scales are frequently used.

The United States consumer reacts positively to products. This is due to a number of factors that influence the participant, physically and psychologically; therefore, quantitative scales play a key role in consumer testing.

2. Scales to Avoid

- Any complicated scales that are not easily read or understood.

3. Recommended Scales

The following is a 9-point hedonic (liking) scale that is widely used in the United States for consumer testing. Different formats can be used utilizing the same question:

Acceptability:

1. Considering everything, what is your OVERALL OPINION of this product? (Circle the number below which best describes how much you like/dislike this sample, Overall)								
1	2	3	4	5	6	7	8	9
Dislike Extremely	Dislike Very Much	Dislike Moderately	Dislike Slightly	Neither Like nor Dislike	Like Slightly	Like Moderately	Like Very Much	Like Extremely

1. **OVERALL**, considering everything about this product, how much did you **LIKE** or **DISLIKE** it? Do you...

(Check one answer)

- Like extremely
- Like very much
- Like moderately
- Like slightly
- Neither like nor dislike
- Dislike slightly
- Dislike moderately
- Dislike very much
- Dislike extremely

For a 9-point scale, usually a 9 is designated as the most liked/strongest, a 5 is neither like or dislike/just right, and a 1 is disliked most/weakest.

Other scales that can be used can include the 5-point Just About Right Scales (JAR):

Thinking about the product you just tasted, was the sweetness,

(one direction)	(two directions)
Much too sweet	Much too high
Somewhat too sweet	Somewhat too high
Just about right	Just about right
Not sweet enough	Somewhat too low
Not nearly sweet enough	Much too low

Examples of a 9-point intensity scale:

How intense was the ORANGE FLAVOR of this sample? (Circle a number from 1 to 9 which best represents your opinion about the intensity of the orange flavor.)

1	2	3	4	5	6	7	8	9
None								Extreme

V. TEST ADMINISTRATION

A. LOGISTICS

The following should be considered when conducting consumer testing in the United States:

- Many people live outside of the “center of the city” area. It is possible but not easy to prerecruit a large number of consumers for a central location test.
- Most research agencies have small storage and testing spaces. Utilizing an outside storage facility also is quite expensive. Shipping only a minimal amount of products/equipment will save on

research costs and will enable easier/faster logistics. Obtaining a floor plan of the testing facility/storage is also useful.

- Extra time should be allowed when conducting a test during extreme weather conditions, especially if appointments are made immediately before and after work hours during heavy traffic.

B. PAYMENT/INCENTIVES

The most common incentive is monetary. Gift bags or certificates are also given. In the case of children, incentives are usually given to the parent or guardian to be distributed to the child. The amount given to each respondent will vary depending on how long the interview lasts, incidence, time of year, and location in the country. The outside consumer facility or company affiliate can advise on the adequate incentive type and amount for the test being conducted.

VI. MISCELLANEOUS

A. OTHER ITEMS FOR CONSIDERATION

The following section itemizes areas that are included for consideration when preparing to conduct typical consumer research in the United States. A research vendor should review them and customize this section based on their own company guidelines.

STEPS TO COMPLETING A STUDY:

1. Objective/Products

Prior to any study you will need to write the research objective, identify products/concepts to be tested, specify the test methodology, identify screening criteria for the respondents and test locations.

2. Proposal

Contact several suppliers or field services and ask them to submit a proposal for your study. The proposal will document the methodology, screening requirements, estimated costs and timing, and both the expectations and responsibilities for all parties.

Sample Screening Guidelines

These are examples of guidelines that have been used by consumer testing facilities:

- Respondents are pre-recruited based on specified gender, age, brand usage, income, ethnic group, education level, or other special requirements as indicated by the development team. Respondents should not have allergies, medical (diabetes, etc.), or religious restrictions to the product being evaluated. No respondent will be employed in markets related to the product being tested.
- No respondent will have past participation related to the product being tested for the past six months.
- Only one respondent from a family may participate in a test unless otherwise instructed by the client.
- Respondents will need working phone numbers (no pay phones or pagers).
- Respondents will not be biased to the concept or products/flavors being tested.

3. Product/Concepts

You are to provide the product/concepts at least one to two days prior to testing. Please include all storage requirements (38–42°F, 0°F, clean refrigerator, etc.) if important. Products can be tested branded or with blinding 3-digit codes. If the field service is to purchase materials from the market, provide detailed procedures (batch numbers, shipping instructions, etc.); ask the field service to include the cost in the proposal.

4. Questionnaire Development (optional)

A consumer testing facility, not a field service in most cases, will be able to develop the screener, questionnaire, and demographics based on your specifications. A questionnaire is to be approved by all parties prior to printing. If possible, send product or concepts to the person working on the materials to help them ask the appropriate questions. A final questionnaire will be approved at least three working days prior to fielding to allow for copying/coding/programming of materials (if applicable), and shipment to test locations. A test may be delayed if changes are made to a questionnaire after approval and additional costs may be charged.

5. Rotation/Randomization (optional)

If you are not going to be providing a rotation/breakdown for the research facility please let them know so they can include this in the bid. Balancing for age, gender, or other requirements gives the test more validity due to the diversity of the group. The rotation should be based on the screening requirements so there is a balance within the quota. The purpose of the rotation is to balance the order of product/concept presentation so that, over the course of the entire test, each product/concept is seen in all positions equally by each segment.

6. Field Instructions

Field instructions should be written for all studies. The instructions should be detailed, itemizing all aspects of the field procedure for a test. These include type of test, product handling and storage, product preparation issues, screening requirements, supplies needed, specific testing environment requirements, staffing needs, test procedure, communication of instructions to panelists, and any instructions related to returning completed questionnaires for data entry, statistical analysis requirements, etc. The field service will use these instructions to make sure the study is conducted correctly.

7. Timing

Timing will include the start and end dates for a test, as well as partial shipment dates to the data entry department, and data to the client for analysis, report writing, or presentation if needed (if applicable).

When determining the final timing of a study, include several additional days to account for the unexpected. This could include weather issues resulting in delayed receipt of products, materials, or respondents, due to snow, hurricanes, or other types of bad weather. The winter months (November–March) tend to have more weather-related delays than other times of the year.

8. Statistical Analysis (optional)

The type of statistical analysis required should be specified up front to make the analysis, graphing, and reporting steps easier and produced in a timely manner.

Many suppliers have capabilities to develop experimental designs, randomize samples/concepts and balance for gender, age, etc. They can also develop the rotation used for recruitment of respondents for a test, obtain supplies, and creating questionnaires. Preparations are then made for the data entry, cleaning, and analysis.

COST CONSIDERATIONS

The total cost of a project depends on the screening requirements, test types and design, length and type of interview, vendor capabilities, services requested and facility requirements, etc. Each variable will be discussed briefly below on how it impacts the cost of a sensory project.

Screening requirements: Recruiting costs can account for over 50 % of the costs of testing. You should be aware that as the screening qualifications become more specific, the recruiting costs increase proportionally. The lower the incidence the more money it will cost. An incidence below 10 % recruiting costs can be hundreds of dollars per panelist.

Test Types and Design: The type of test and design impact the cost of research. In general, qualitative costs are higher per respondent than quantitative research. This is due to moderator costs, facility rental, longer interviewing length, and higher respondent fees. Monadic tests are also more expensive than multiple sample or multiple session studies when similar numbers of judgments per sample are required because of increased recruiting. Conducting a multiple session study is the most cost efficient method. Breaks between sessions can be hours, days, or weeks.

Interview Length and Type of Interview: The longer the interview, the higher the cost. In 2000, typical interview costs were approximately \$25 for the first 15 minutes and then \$7 for every five minutes after. Interviewer-administered questionnaires cost more than self-administered questionnaires. Computerized interviewing costs were typically higher than paper ballots due to programming and data transfer costs; however, these costs may reverse in the future.

Vendor Capabilities and Services Rendered: There are several types of research vendors—field service, supplier, and full-service supplier.

Each type of vendor has associated costs.

- Field service specializes in product testing only. Each service is usually located only in a few cities and they provide minimal services.
- A supplier typically does not have their own field sites; rather, they contract field services located throughout the United States to do the testing for them. A supplier usually provides a wide range of

services including: test and questionnaire design, field management, and statistical capabilities.

- A full-service supplier usually owns numerous field services throughout the United States or contracts with a number of field services, as needed.

Note: Working with a field service directly is usually the most cost effective method but you will need to contact the individual field services, develop, copy, and coordinate testing materials, etc. Other issues include the coordination of multiple services when multiple test locations are required, data entry, and statistical analysis.

Costs for services rendered by a supplier or full service agency could include: product preparation or pick-up; questionnaire development, data entry, computer programming, statistical analysis, etc. These costs are all additional costs above those for fielding a project.

Facility Requirement: The facility requirements can affect the cost of a study. Products that require preparation are more expensive than ready-to-serve products due to increased personnel and equipment needs. Field services located in malls typically have very small offices (about 1000 sq. ft) due to the high rent. Mall focus groups typically are small with minimal viewing capabilities. Typically, the more rooms required for testing, the higher the overall test costs.

VII. REFERENCES

Meilgaard, M., Civille, G., and Carr, T., 1999, *Sensory Evaluation Techniques*, 3rd ed., CRC Press, New York, NY.

Resurreccion, A., 1998, *Consumer Sensory Testing for Product Development*, Aspen Publishers, Inc., Gaithersburg, MD.

United States Demographic Profiles-2000, United States Census Bureau; URL:
<http://censtats.census.gov>

Holidays, URL: <http://usinfo.state.gov/usa/infousa/facts/factover/holidays.htm>