A social institutional approach to identifying generation cohorts in China with a comparison with American consumers

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Abstract
Identifying distinctive target segments is a fundamental challenge faced by international marketers. This paper describes an approach to understanding consumer market structures in an important international market, China, and to segmenting Chinese consumers by integrating insights from generational cohort and social institutional theories. We conduct two empirical studies to verify how China’s recent momentous ideological events could give rise to and affect the life experiences of different generation cohorts in the country. The results of Study 1 support the conceptual framework and establish three distinct cohorts in China: Red Guards, Modern Realists, and Global Materialists. Study 2 builds on the findings of Study 1: it links cohort differences to differences in consumer values (materialism) and choice behaviors (foreign vs local brands), and then compares them with parallel consumers in the United States. This paper outlines and tests an approach to segmentation that can help international firms identify distinct segments in and design effective marketing strategies for China.

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Introduction
A conceptual understanding of how consumers behave in different cultures represents the first step in designing effective international marketing strategies (Johansson and Thorelli, 1985). Such understanding is crucial, because it enables managers to interpret what they observe in foreign markets and postulate how consumers might respond to firm strategies (Zou and Cavusgil, 2002; Walters and Samiee, 2003). Because today’s market is increasingly characterized by hypercompetition and well-defined brand positioning, the identification of distinctive target segments offers a fundamental challenge to international marketing (Zou and Cavusgil, 2002; Batra and Tse, 2003).

International segmentation studies have identified multiple categories that might serve as bases for segmentation. The availability of published secondary data (e.g., Euromonitor, United Nations, World Bank) makes country-level variables such as economic indicators and political characteristics the most popular segmentation bases (Steenkamp and Hofstede, 2002). These bases
enable MNCs to identify clusters of target countries, although they generally do not account for intracultural variations (Au, 1999). Other studies use disaggregated information such as demographics (e.g., age, gender, income) and psychographics (e.g., VALS) to provide managers with more detailed understanding of market structures. Among disaggregated bases, a hybrid approach - cohort segmentation - takes advantage both of the stability that age segmentation offers (Steenkamp and Hofstede, 2002) and of the insights into consumer motivations that value segmentation offers. Although cohort segmentation has attracted research interest in the US market, it has seldom been applied in an international marketing context.

A generational cohort refers to a consumer segment that uses a consumer's coming-of-age year as a proxy to postulate his or her value priorities developed through life experiences during his or her formative years, which may persist throughout that person's lifetime. For example, the baby boomers in the United States, who came of age during an era of general prosperity but lost confidence in government and other institutions, became the 'me' generation (Meredith and Schewe, 2002). The increased interests in their well-being prompted baby boomers to redefine the notion of middle age by investing heavily in anti-aging products, cosmetic plastic surgery, fitness programs and sports cars: this behavior contrasts with that of middle-aged citizens in previous generations, who accepted the prevalent notion of middle age rather than actively resisting the aging process (Weiss, 2002).

If middle age can mean something quite different from one generation of Americans to another, who grew up in environments that are relatively stable, the need to identify distinct cohorts in transitional economies, in which the environment is by definition volatile, must be acute. In a country such as China, which has undergone considerable changes during the past 50 years, people are likely to pursue values and behaviors that reflect the value priorities of their coming-of-age era. If so, how effective is cohort as a basis for segmenting consumers across generations in China? Can this approach help identify segments unique to China? What socioeconomic processes give rise to and characterize these segments? And, finally, what insights will the segmentation rationale and accompanying processes offer to international marketing managers regarding segments' value orientations and consumption patterns?

The current study attempts to address these questions by investigating the impact of changing institutions on cohorts of Chinese consumers. We draw on social institutional theory - well established for firm-level studies in China (North, 1990; Walder, 1995; Bäckström and Child, 1999) - and supplement it with historic generational cohort theory and a collective memory explanation to develop an integrated framework applicable to consumer studies. We then identify three cohorts of consumers in China, and verify in two surveys the differences in their values and consumption behaviors. We also improve on previous attempts to investigate cohorts in China using approximations (e.g., 1951-1960, 1961-1970) to define cohort membership, which may not tie in with socio-historical events in the country (e.g., Egri and Ralston, 2004).

Understanding consumer behavior in China

Among the pioneering attempts to understand how the 1.3 billion Chinese consumers behave, Schmitz (1997) highlights age group differences as a fundamental characteristic of the Chinese market. Whereas some age group differences can be attributed to intergenerational gaps, which constitute an integral part of social development, others point to drastic changes in China's social institutions. Belk and Zhou (2002) explore the onset of China's revolutions and political campaigns during the past 50 years, and postulate that these events help explain how Chinese consumers behave today. Fong (2004) notes that major changes in the country's institutions have socialized parents and their children with conflicting ideologies, and have presented them with different opportunities and constraints. Egri and Ralston (2004) examine the values among managers and professionals in China and the United States, and find that the Chinese/US cohorts who grew up during China's closed-door policy evoke the least similar values. These observations suggest that China's eventful recent past, at the societal level, has mapped its people's life experiences at the individual level, a relationship that deserves further investigation.

Another reason why we chose China as our research context is that China has undergone multiple distinct and momentous revolutions and political campaigns during the past 50 years. Few countries have undertaken such rapid social experiments for successive age groups in the way
China has (Rosen, 2000; Belk and Zhou, 2002). Therefore consumer demand in China, a socialist market economy, may be more strongly affected by institutional decree than it would be in a full market economy. Moreover, China is the largest developing economy, and attracts many MNCs that could benefit from the findings of our research. In summary, this research outlines and tests a segmentation approach that may enable MNCs to use readily available information (e.g., census data about country demographics) to postulate information that is usually difficult to collect in transitional economies (e.g., motivations to consume). A comparison with US consumers in the latter part of this research highlights the effects of changing institutions on consumers in China, and contributes to our understanding of international segmentation.

Social Institutional theory
Social institutional theory pertains to the way institutions emerge, function, and evolve to affect the behaviors of persons and firms in a society. Institutions include: formal organizations, such as governments; legitimizing bodies, such as public opinion, professions, religions, and ideologies (Scott, 1987); 'invisible' rules of operation, such as culture and norms (DiMaggio and Powell, 1983); and the process of habituation, according to which actions that are repeated become cast into a pattern (DiMaggio and Powell, 1983). These Institutions represent the structure and mechanisms that function as the 'rules of the game' in a society (North, 1990).

Institutions typically change incrementally. However, cataclysmic events such as World War II bring forth breaking points and discontinuous institutional changes (Inglehart, 1977). More recently, when formerly planned economies adapted to the free market system, many institutions underwent drastic reform (Lau et al., 2002) to render firms more 'marketized' (Nee, 1992) and profitable (Walder, 1995). These disruptive social changes have given Nobel laureates in economics (North, 1990), leading sociologists (Walder, 1995), and pioneering organization theorists (Boisot and Child, 1999) a context from which to derive implications about firms in China.

Historic generation cohort theory
The concept of generation and its influence on cohorts of people has been discussed widely in sociology, anthropology, and social psychology research. Inglehart (1977, 1990) and his colleagues (Abramson and Inglehart, 1995; Inglehart and Norris, 2003) have demonstrated, using longitudinal data from 40 countries, that once a society embarks on industrialization, fundamental changes in values occur, including a greater emphasis on belonging, self-expression, and quality of life (or 'postmodern values') in lieu of economic and physical security (or 'materialist values'). Central to Inglehart's thesis is that value changes take place gradually as a younger generation, socialized within a particular socioeconomic system during its pre-adult years, replaces an older generation as the adult population in a society.

Rogler (2002) expands Inglehart's thesis into an integrated theory by postulating that the emergence of distinct generations and the formation of their collective identity can be attributed to similar life experiences. Rogler's work adopts a historical perspective with three underlying theses. First, cataclysmic events (i.e., wars, revolutions, natural or man-made disasters) that shake the foundation of the existing social order 'give birth' to a new generation. Second, because a person forms his or her value system during his or her pre-adult years, but experiences a crystallization of the process by the time he or she reaches adulthood (McCrae et al., 2002), cataclysmic events impose a stronger imprint on a coming-of-age group than on other age groups living through the same historical period. Third, consolidated orientations, including a person's values and goals, as supported by his or her peers, persist throughout his or her life. In short, cataclysmic events enforce a stronger, longer-lasting value imprint on the coming-of-age group than on other age groups who live through the same historic period.

Collective memory explanation
An important theoretical tenet that underlies institutional theory and historical generation cohort theory is collective memory. A person's memory encompasses shared memory with the collectivities of which the person is a part (Belk, 1988, 1991; Lipsitz, 1990). Because memories are often shared and jointly enacted, as well as reinforced by rituals and artifacts (Hallward, 1950), societies remember collectively, and the rituals are maintained among peers (Connerton, 1989; Holbrook and Schindler, 1989; Belk, 1991). This intergenerational differences in values and behaviors may be driven by different events and life experiences.
Social institutional changes and generation cohorts in China

We identify the Cultural Revolution (including the Sent-Down Movement) (1966–1979), the Economic Reform (1980–1991), and the globalization of China (1992– ) as major events that have given birth to recent generation cohorts in China. The Cultural Revolution was the most disruptive of these events, and the destruction it caused has been widely publicized. The Economic Reform and globalization of China, though less disruptive at a personal level, introduced new social orders, ideologies, and institutional drivers that, according to Rogler (2002), cultivate coming-of-age groups’ values. We categorize persons into cohorts on the basis of the specific event they experienced during their coming-of-age years.

Cohort 1: Red Guards

The Red Guards came of age during the Cultural Revolution (1966–1979), when China was closed to the outside world and commercial activities came to a halt to give way to social/political class struggles. During the early years of the movement, many students were inspired to become Red Guards. They sacrificed their youth, material comforts, and family life for the welfare of the country and the Communist Party. During the climax of the movement, nearly 17 million young intellectuals, who were led to believe that they were in need of re-education by peasants, relocated to rural areas, where the living conditions were harsh. Although the Cultural Revolution appeared to be a movement engineered to indoctrinate young people with herosim and idealism, and spur them to improve China’s conditions through revolutionary efforts (Rosen, 2000), it was believed to be at least in part political and aimed at defusing potential social unrest due to massive unemployment (Xia and Lu, 1993).

The Red Guards have often been considered the ‘lost’ generation of China (Chen, 1999), given the harsh, bitter, and violent struggles they endured during their formative years, which did not prepare them for the changing world. In turn, this cohort may be less open to change (Egri and Raivol, 2004). Thus the social/political ideologies the Red Guards acquired during their coming-of-age years probably continued to condition their attitudes and consumption behavior, even after China entered the open economy era. We propose that the Red Guards will be pessimistic in their outlook, and remain frugal and conservative in their consumption attitudes and behavior.

Cohort 2: Modern Realists

The Modern Realists came of age during the Economic Reform (1980–1991), and grew up in a society whose economy was transforming from a centrally planned system that stressed egalitarianism to a market system that stressed competition, entrepreneurship, and individual accomplishment. Unlike the Red Guards, who were subjected to social/political class struggles during their coming-of-age years, the Modern Realists were encouraged by the government to pursue a relatively comfortable life— or Xiaokang (Lu, 2000). The political will behind the Economic Reform was supported by institutional changes, such as establishing special economic zones, encouraging overseas Chinese to invest in the motherland, deregulating the market and state-owned firms, and maintaining robust economic growth (China Statistical Yearbook, 2002). Many members of the cohort took advantage of these institutional changes by moving to special economic zones, accumulating personal wealth, and achieved Xiaokang. A survey conducted between 1989 and 1992 showed that attitudes toward money/worth among youths in China were highly favorable (Tang and Parish, 2000). Another survey showed that respondents born between 1971 and 1975 were more entrepreneurial than were the generations that preceded them (Egri and Raivol, 2004). We suggest that these institutional changes encouraged Modern Realists to become novelty seekers. The Economic Reform also ‘reinvented’ the advertising industry, which grew in leaps and bounds (China Advertising Association, 2002). Thus Modern Realists have been cultivated by advertising and marketing institutions to become materialistic.

Cohort 3: Global Materialists

Global Materialists were born after the Cultural Revolution, and came of age in 1992 or thereafter, when China was integrating into the global community. During this period, the GDP continued to grow by approximately 10% annually, and China became Asia’s largest advertising market (Xu, 2000). Thus Global Materialists were exposed to increased levels of affluence in society and consumerist messages in the media. The Internet also helped this cohort connect with the outside world (Hung and Li, 2007), so its members developed tastes in fashion and products similar to those of youths.
around the world (Arnett, 2002). Meanwhile, overseas Chinese, especially those in Hong Kong, represented the main source of FDI in China throughout the 1980s. By 1992, FDI soared from US$4.37 billion a year earlier to US$11.01 billion as MNCs responded positively to the government’s policy to globalize China, as Deng Xiaopeng indicated on his 1992 tour to southern China. FDI then increased fivefold over the next decade. This wave of investors included firms from Europe, Asia, and the US (Zhang and Huang, 2003), and ensured the presence of global brands in China.

The younger segment of this cohort was also born after the implementation of the one-child policy (Jing, 2000). These ‘little emperors’ grew up in an environment in which many were cared for by six doting family members (each (parent and grandparent) who tended to indulge them. We hypothesize that these institutional changes have cultivated in the Global Materialists even higher levels of novelty seeking and materialistic values, as well as a stronger orientation toward conspicuous consumption, including a preference for foreign brands.

Overview

We postulate that institutional changes that arise from historic, cataclysmic events may explain the significant differences across cohorts of people in China. Thus the Red Guards may be negative in their outlook and frugal in their consumption behavior, the Modern Realists may be interested in monetary wealth and consumption of novel things, and the Global Materialists may be even more open than the Modern Realists and desire foreign goods. In the following, we report two empirical studies. Study 1 establishes China’s three distinct cohorts by examining differences in values (novelty seeking and pessimism) and consumption of products and services (shopping as leisure or burden; use of traditional or novelty products). Novelty seeking is similar to consumer innovativeness (e.g., Steenkamp et al., 1999), but it encompasses a broader conceptualization, which goes beyond diffusion and product adoption. Pessimism triggers coping mechanisms that affect a person’s consumption patterns (S dulow, 1991). Study 2 builds on the findings of Study 1, and links cohort differences to materialism and brand choice behavior (i.e., foreign vs local brands). In Table 1 we provide a summary of the cohorts, including institutional changes, life experiences, alleged values, and consumption implications.

Study 1: Cohort Identification and Investigation

Differences in personal value orientations

Novelty seeking

The approach temperament indicated by novelty seeking captures both the entropic and exploratory spirit to explore new ventures and the consumption need to try alternative and exciting things. We postulate that the novelty-seeking value will be embraced differentially by the cohorts. Modern Realists came of age when the predominant ideology was to lead a relatively comfortable life. Global Materialists came of age when society was becoming even more open and affluent. Therefore Modern Realists and Global Materialists should develop stronger novelty-seeking values than Red Guards, as a result of their life experiences.

Pessimism

The value of pessimism is characterized by the negativity and withdrawal that often accompanies economic and other forms of deprivation (Wang, 1994). A pessimist generally attends to the negative aspects of a given situation, and uses denial and disengagement when under stress (Gibson and Sanbonmatsu, 2004). Whereas Red Guards endured a harsh and deprived upbringing during the Cultural Revolution, only to be disappointed by their lack of relevant skills in the open economy, Modern Realists and Global Materialists were well provided for during their coming-of-age years, and enjoyed more opportunities as the economy improved. We therefore posit that Red Guards will be more pessimistic than the other two cohorts.

Hypothesis 1: Modern Realists and Global Materialists are (a) more novelty seeking and (b) less pessimistic than are Red Guards.

Differences in shopping attitudes and product usage

People tend to hold attitudes and behaviors consistent with their values and higher-order goals (Huffman et al., 2000). Prior research shows that a person with high novelty-seeking values is interested in new products, and responsive to advertising and promotions (Goldberg et al., 2003; Hung et al., 2005). We extend this line of research to examine cohort differences in shopping attitudes and product usage.
Table 1: Year of birth, institutional changes, life experiences, values, and consumption: implications across cohorts

<table>
<thead>
<tr>
<th>Social institutional changes</th>
<th>Global materialists</th>
<th>Modern realists</th>
<th>Red guards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Study 1 (2002)</td>
<td>18-28</td>
<td>29-37</td>
<td>38-51</td>
</tr>
<tr>
<td>Age at Study 2 (2000)</td>
<td>18-26</td>
<td>27-35</td>
<td>36-49</td>
</tr>
<tr>
<td>Social institutional changes</td>
<td>Globalization</td>
<td>Economic Reform</td>
<td>Cultural Revolution</td>
</tr>
<tr>
<td></td>
<td>Global integration</td>
<td>Xiaokang</td>
<td>Socialist, Maoist ideology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-35</td>
<td>0.1 (1979)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.16-4.37</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.30%</td>
<td>n/a</td>
</tr>
<tr>
<td>Life experiences</td>
<td>Increased exposure to mass media and the Internet</td>
<td>Venture to coastal cities and special economic zones to take advantage of the market economy</td>
<td>Became Red Guards</td>
</tr>
<tr>
<td></td>
<td>Affected by global consumer culture</td>
<td>Became entrepreneurial, accumulated personal wealth</td>
<td>Relocated to rural areas in support of the 'semi-down' movement</td>
</tr>
<tr>
<td></td>
<td>Increased exposure to MNCs and foreign brands</td>
<td></td>
<td>Gave up education</td>
</tr>
<tr>
<td>Alleged values</td>
<td>Novelty seeking (higher)*</td>
<td>Novelty seeking*</td>
<td>Pessimistic*</td>
</tr>
<tr>
<td>Implications for consumption</td>
<td>Materialistic (higher)*</td>
<td>Materialistic*</td>
<td>Non-materialistic*</td>
</tr>
<tr>
<td></td>
<td>Shopping as leisure (higher)*</td>
<td>Shopping as leisure*</td>
<td>Shopping as burden*</td>
</tr>
<tr>
<td></td>
<td>Use novelty products (higher)*</td>
<td>Use novelty products*</td>
<td>Use traditional products*</td>
</tr>
<tr>
<td></td>
<td>Use foreign brands (higher)*</td>
<td>Use foreign brands*</td>
<td>Use local brands*</td>
</tr>
</tbody>
</table>

*Study 1.  
*Study 2.

Consumers hold different attitudes toward shopping: some consider it a mundane task and dislike the activity, whereas others consider it a conspicuous, enjoyable activity (Gardner and Sheppard, 1989). For these latter leisure shoppers, the shopping environment allows them to stay up to date with new products, enjoy social encounters, and experience sensory stimulation (Lant and Livingstone, 1992). We postulate that Modern Realists and Global Materialists, whom we purport to be novelty seekers, will consider shopping a leisure activity, because they value the stimuli that shopping provides, whereas Red Guards, whom we purport to be pessimists, will be likely to consider shopping a burden.

Hypothesis 2: Modern Realists and Global Materialists are (a) more likely to view shopping as a leisure and (b) less likely to view shopping as a burden than are Red Guards.

In terms of product usage, consumers have differential preferences. We differentiate specifically between traditional products that have a long history in China (e.g., tea) and novelty products that have become popular in China only recently (e.g., coffee). Few products marketed by MNCs in China are traditional products; rather, novelty products often are introduced to Chinese consumers by MNCs. We postulate that the novelty-seeking Modern Realists and Global Materialists will have a higher propensity to use novelty products, whereas the pessimistic Red Guards will have a higher propensity to use traditional products.

Hypothesis 3: Modern Realists and Global Materialists are (a) more likely to use novelty products and (b) less likely to use traditional products than are Red Guards.

Socioeconomic control variables

Previous research on segmentation suggests that socioeconomic variables are useful for differentiating segments of consumers. We include the following covariates in our analyses of variance: city tier, a
proxy for regional economic development; family income and education, proxies for a person's socioeconomic status; and gender, which indicates men's and women's different category and shopping needs.

Regional differences represent an important socioeconomic factor in China (Walters and Samtue, 2003). Specifically, coastal cities have attracted a higher proportion of FDI and have benefited more from economic and globalization reforms than have inland cities. We divide the cities we survey into two tiers based on per capita GDP to account for regional differences. In cross-tabulation tests, we run the analyses per city tier to provide insights into cohort effects.

Methods and results

A major research firm collected the data for Study 1.

A total of 2970 respondents between the ages of 18 and 52 years participated. During face-to-face interviews, respondents rated items pertaining to their values (novelty seeking, pessimism) and shopping attitudes (leisure, burden) on five-point scales (1=strongly disagree, 5=strongly agree), and indicated, using yes/no responses, whether they used or consumed on a regular basis specific traditional products (tea, rice wine) or novelty products (cellular phones, coffee). The measures of novelty seeking (Steenkamp and Baumgartner, 1992) and pessimism (Lunt and Livingstone, 1991) indicate the cohorts' dispositions. The measures of shopping attitudes were adapted from Lunt and Livingstone (1992). We selected tea and rice wine to represent traditional products. Cellular phones and coffee represent products introduced to China more recently. We tested a replication of two products in each category to enhance the reliability of our findings.

The survey was conducted in 2002. On the basis of the respondents' age at the time of the survey, we classify them into cohorts in accordance with the definitions provided in Table 1: 30.3% of the respondents are Global Materialists, 22.2% are Modern Realists, and 47.5% are Red Guards. The data cover 10 cities, which we categorize into tier 1 cities (Beijing, Shanghai, Guangzhou, mean per capita GDP=$CNY 36,987) and tier 2 cities (Chengdu, Dalian, Nanjing, Shenyang, Wuhan, Xi'an, and Zhengzhou, mean per capita GDP=$CNY 19,396) (China Statistical Yearbook, 2002). We also include the covariates of gender, family income (four levels: $CNY 800 or less, $CNY 801–1500, $CNY 1501–3000, $CNY 3001 or more), and education (four levels: junior high or below, high school, college, university and postgraduate study).

We performed a principal component factor analysis (EFA) with varimax rotation. Using the eigenvalue (>1) and Scree test as criteria, we obtain our theorized latent constructs with no cross-loadings greater than 0.30. The four factors explain 52.28% of total variance. We delete one item from pessimism that has a low factor loading (λ<0.44). We then conduct a CFA that yields a satisfactory model fit (χ²=485.348, df=184, P<0.001, CFI=0.943, GFI=0.978, AGFI=0.969, RMSEA=0.040). All construct reliabilities (0.75 for novelty seeking, 0.60 for pessimism, 0.71 for shopping as leisure, 0.67 for shopping as burden) satisfy the standard desirable value of 0.60 for exploratory research (Bagozzi and Yi, 1988). We then assess the discriminant validity of our measures by testing the confidence intervals of the phi estimates of our constructs: none of them includes unity. We also conduct a series of CFAs, as recommended by Bagozzi et al. (1991). The results suggest that, for every pair of factors in the measurement model, a two-factor model fits the data significantly better than a one-factor model, demonstrating satisfactory discriminant validity (Anderson, 1987; Bollen, 1988). We provide details of the measures in Table 2.

Cohorts, values (H1), and shopping attitudes (H2)

We hypothesize that the Global Materialists and Modern Realists are novelty seekers (H1a), whereas the Red Guards are pessimists (Hb). The results of an ANCOVA (with city tier, gender, income, and education as covariates) show significant overall cohort effects for Global Materialists, Modern Realists, and Red Guards (novelty seeking: F(6,2824)=46.59, P<0.001, M²=21.74, 20.72, 19.86, respectively; pessimism: F(6,2824)=3.96, P<0.05, M²=4.86, 5.06, 5.12, respectively). The Global Materialists (P<0.001) and Modern Realists (P<0.001) score significantly higher mean values on novelty seeking than do the Red Guards, whereas the Red Guards score significantly higher mean values on pessimism than do the Global Materialists (P<0.01), though not the Modern Realists (P>0.05). These findings provide full support for H1a and partial support for H1b (Table 3). Meanwhile, the Global Materialists score significantly higher mean values on novelty seeking (P<0.001) compared with the Modern Realists, but there are no significant differences between these two cohorts on pessimism (P>0.05). The covariates exert differential effects on the reported
values: education, income, and gender exert significant effects on both novelty seeking (P<0.001) and pessimism (P<0.05), whereas city tier exerts significant effects only on pessimism (P<0.01).

We also hypothesize that Global Materialists and Modern Realists view shopping as a leisure activity (H2a), whereas the Red Guards view it as a burden (H2b). The results of an ANCOVA (with city tier, gender, income, education as covariates) again show significant differences (leisure: F(6,2824)=70.33, P<0.001, M(S)=7.33, 6.72, 6.32, respectively; burden: F(6,2824)=17.20, P<0.001, M(S)=5.63, 5.78, 6.10, respectively). Compared with Red Guards, Global Materialists (P<0.001) and Modern Realists (P<0.001) are significantly more likely to view shopping as a leisure activity, whereas the Red Guards are significantly more likely to view shopping as a burden than either Global Materialists (P<0.001) or Modern Realists (P<0.001). Meanwhile, Global Materialists are more likely than Modern Realists to view shopping as a leisure activity (P<0.001), though there is no significant difference between the two cohorts with regard to shopping as a burden (P>0.05). City tier exerts significant effects on shopping as a burden (P<0.001). Gender exerts significant effects on both shopping as leisure (P<0.001) and shopping as burden (P<0.001). Neither income nor education exerts significant effects (P>0.05). Thus the findings provide support for H2a and H2b (Table 3).

Cohorts and product usage (H3)

H3 suggests that Global Materialists and Modern Realists are more likely to be novelty product users (H3a), and Red Guards are more likely to be traditional product users. We conduct a series of cross-tabulations (per city tier) to assess the cohorts' product usage. We find that, in tier 3 cities, novelty products are used by a significantly higher proportion of Global Materialists and Modern Realists (cell phone: χ²=34.16, P<0.001, M(S)=57.9, 54.4%; coffee: χ²=17.19, P<0.001, M(S)=23.5, 18.8, 11.8%); whereas traditional products are used by a significantly higher proportion of Red Guards (tea: χ²=12.51, P<0.01, M(S)=44.8, 49.3, 57.9%; red wine: χ²=22.20, P<0.001, M(S)=5.7, 7.9, 16.4%). We report the findings for tier 2 cities in Table 3.
their cohort effects are very similar, in support of both H3a and H3b.

Study 2: Materialism, foreign brand consumption, and cross-national comparison
Study 1 provides empirical support for the suggestion that consumers who have been exposed to the same historic cataclysmic events and altering social institutional conditions in China exhibit similar values, shopping attitudes, and product usage. Study 2 builds on these findings and examines cohort differences in materialism and foreign brand usage that should be of interest to international marketers. Study 2 also provides a comparison of findings on consumption patterns between Chinese and US consumers to provide additional evidence that the effects we identify are due to cohort, rather than life cycle, differences.

Materialism
Materialism refers to a consumption-based orientation toward happiness (Inglehart, 1981). At the highest level, possessions assume a central place in a materialist’s life, and provide him or her with the greatest sources of satisfaction and dissatisfaction (Belk, 1984). Materialism also may act as a substitute for a lost sense of community (Easterlin and Crimmins, 1991; Achtertender, 1977), and enable an acquisitive person to participate in an imagined perfect life (Campbell, 1987). Thus a person high in materialistic values is possessive, desires a higher income, and places less emphasis on interpersonal relationships (Richins and Dawson, 1992).

For our study, whereas Red Guards acquired socialist/Maoist ideology and endured the Cultural Revolution when they were coming of age, Modern Realists and Global Materialists came of age when advertising spending, FDI, and GDP were growing rapidly and the political climate was more open. Although Study 1 shows that Global Materialists and Modern Realists are more prone to novelty seeking, a closer look suggests that the cohorts differ in the way they realize their novelty-seeking values: Modern Realists are more intent on entrepreneurship (Egril and Ralston, 2004), whereas Global Materialists focus on consumption as a result of their greater exposure to media advertising, the Internet, and global consumer culture. Because of the cohorts’ differential experiences we suggest that Global Materialists will be more materialistic than either Modern Realists or Red Guards. In contrast, Red Guards enjoy strong bonds with their peers, and will
have little need for an imagined substitute commu-
nity. In short, we suggest that Global Materialists will be the most materialistic and Red Guards the least materialistic cohorts.

**Hypothesis 4:** Global Materialists are (a) more materialistic than Modern Realists, (b) who in turn are more materialistic than Red Guards.

**Foreign brand usage across cohorts**

Foreign brands usually promote global/Western images when marketed in transitional economies (Alden et al., 1999), a strategy that enhances the desirability of foreign brands among local consu-
mers, who associate foreignness with quality and prestige because of the brands’ higher prices and relative scarcity (Batra et al., 2000; Steenkamp et al., 2003). If Global Materialists are the most materi-
 alistic cohort, they should value the quality and prestige associated with foreign brands more than do Modern Realists or Red Guards. In addition, Global Materialists perceive themselves as members of a global community, as a result of their greater exposure to MNC products and global consumer culture. Prior research shows that congruity between a product and self-image facilitates prod-
uct purchase (Shin et al., 2000), so we argue that Global Materialists, who relate more strongly to foreign brands, will have a higher likelihood of using them than the other cohorts.

**Hypothesis 5:** Global Materialists are more likely to be foreign brand users than either (a) Modern Realists or (b) Red Guards.

**Foreign brands, product image, and self-congruity**

In addition to categorizing a product into a local or foreign brand, prior research has classified products as utilitarian, symbolic, or routine on the basis of the primary purpose it serves and the consumer’s differential involvement (Vaughn, 1986). Thus we can differentiate foreign brands into purpose-
related subcategories. A Louis Vuitton fashion access-
ory, which is a foreign brand (for Chinese consumers) and a value-expressive product, would be likely to offer twofold symbolic values. In contrast, Colgate toothpaste also represents a for-

eign brand, but serves a low-involvement purpose. The toothpaste probably does not contain high-


involvement symbolic values similar to those attributed to the fashion accessory, even though both are of foreign make.

We have suggested that the congruity between product origin and a cohort member’s self-image facilitates a Global Materialist’s purchase of foreign brands. Research on attitude formation and pur-

chase intentions also shows that a value-expressive product (e.g., fashionable clothing) has greater relevance for consumers who are concerned about their self-image (Shavitt, 1990; Johar and Sirgy, 1991). We posit that the product make/consumer self-image congruity we consider with HS will be more pronounced if the focal product is also value ex-

pressive.

**Hypothesis 6:** Global Materialists are more likely to be users of foreign-made, value-expressive products than either (a) Modern Realists or (b) Red Guards.

**Cross-national comparisons**

We purport to identify in this research three generation cohorts in China, each of which has differential value orientations and consumption behaviors. Because cohort membership is deter-

mined by the coming-of-age year proxy, and people are likely to pass through different life cycle stages as they age, we compare Chinese and American consumers’ consumption patterns, as well as their life cycle stages, to ascertain whether the effects we identify are indeed due to the cohorts’ differential life experiences. As Egli and Ralston (2004) show, the consumers who grew up during China’s closed-
door policy hold the least similar values. Thus we propose that not only will Chinese and Americans of similar ages (and life cycle stages) hold different values as a result of cross-national differences, but the extent of value difference will vary in accor-
dance with the respective dominant ideology in these countries during the cohorts’ coming of age.

People in different life cycle stages have different consumption needs, affected in part by their family responsibilities (Schaniger and Danko, 1995). If the effects we identify are due to life cycle differences, consecutive Chinese cohorts should display consumption patterns similar to consecu-
tive American cohorts, because Chinese and Amer-

ican consumers pass through similar life cycle changes as they age. Alternatively, if the effects we identify are due to cohort differences as a result of people’s life experiences, consecutive cohorts of Chinese consumers will display different consump-
tion patterns from those of their American counter-
parts, even if they are in similar life cycle stages, because of the differences in their life experiences.
These cross-national differences should be greatest among people who grew up during China's closed door policy (i.e., Red Guards in China, born 1951–1964, and baby boomers in the United States, born 1946–1964), when the dominant ideology in each country was least similar.

The baby boomers grew up during a time of general prosperity in the US, and display a consumption pattern that reflects their relatively affluent upbringing (Meredith and Schewe, 2002). Unlike previous generations of 50-year-old Americans who increased their savings when they reached their age bracket, the boomers have reversed the trend by continuing to spend and taking out loans (Russell, 1999; Francesc, 2001). This habit is widespread because the boomers, who grew up during the free-spirited 1960s, have never learned to save (Meredith and Schewe, 2002). This and similar observations led Weiss (2002: 31) to conclude that 'the past income and spending trends we have observed among 55- to 64-year-olds will likely be of little help in predicting what Boomers will do when they move into that age category.' In short, baby boomers are easy spenders, whereas Red Guards are careful spenders.

Home and car ownership across cohorts in the United States and China

Spending on homes and cars are indicative of the consumption profile of Americans at different life cycle stages (Schnaizer and Danko, 1993). As well, the residential pattern among Chinese consumers changes over life cycle stages (Chen, 2005). We outline American cohorts' spending on homes and cars, and then develop hypotheses to compare this spending with levels of home and car ownership across cohorts in China.

We review publications that report consolidated American data from the Bureau of Census and Bureau of Labor Statistics (Russell, 1999; Russell and Mitchell, 1999). These publications show that baby boomers are more likely than younger Americans to be home owners (Russell and Mitchell, 1999). Using an index of 100 to represent average spending on homes, the indexed spending is 18 for Americans under 25 years of age, 78 for those aged 25–34 years, 106 for age group 35–44, and 120 for those 45–54 aged years (Russell and Mitchell, 1999). Thus home-ownership spending may be described as an upward-sloping curve across cohorts in the US. Similarly, car spending indicates an upward-sloping curve across American cohorts (indexed spending: under 25, 53; age 25–34, 82; age 35–44, 112; age 45–54, 147) (Russell and Mitchell, 1999). The higher spending by baby boomers on these purchases falls in line with expectations regarding the life cycle stage that baby boomers occupy: they are more likely to be married (69%) and have larger families (family size = 3.05) than younger Americans (Russell, 1999). In view of Chinese and American cohorts' differential life experiences, we anticipate cross-national differences in home and car ownership across cohorts. Whereas the baby boomers' spending continues to rise compared with younger cohorts, Red Guards' ownership of homes and cars is likely to be comparatively less than that of Modern Realists and Global Materialists.

Hypothesis 7: Unlike baby boomers in the United States, Red Guards in China are less likely to be home owners than (a) Modern Realists or (b) Global Materialists.

Hypothesis 8: Unlike baby boomers in the United States, Red Guards in China are less likely to be car owners than (a) Modern Realists or (b) Global Materialists.

Methods

Research design

The data from 15 cities were collected by China Central Television (CCTV) between 1999 and 2001. We categorize the cities surveyed into tier 1 cities, which include the urban centers of Beijing, Shanghai, Guangzhou, and Shenzhen (mean per capita GDP = CNY 39,248), and tier 2 cities, which include 11 economically less developed cities (Chengdu, Chongqing, Dalian, Fuzhou, Hangzhou, Jinan, Nanjing, Shenyang, Xi'an, Tianjin, and Wuhan; mean per capita GDP = CNY 19,400) (China Statistical Yearbook, 2002). Using the method of probability proportional to sizes, CCTV randomly selected respondents from each city. The interviewers completed half the surveys during face-to-face interviews, respondents completed the remaining half on a self-administered basis, and then received a small token gift. Of the 48,000 respondents, 32,670 fell within the age range of the cohorts, whom we categorized on the basis of their age in the year 2000: 18.3% were Global Materialists, 39% were Modern Realists, and 43.7% were Red Guards.

Materialism

This survey assesses respondents' materialistic values using an eight-item measure adapted from

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Taylor Nelson Sofres (five-point scales ranging from strongly disagree to strongly agree). We conducted a principal component factor analysis with varimax rotation and, using the eigenvalue (>1) and Scree test as criteria, obtain two factors. However, the composite reliability shows that only factor 1 (λ = 0.62) meets the 0.60 criterion (Bagossi and Yi, 1988), so we retain only this factor as indicated in Table 4 for subsequent analysis. A CFA demonstrates the factor’s acceptable goodness-of-fit statistics (χ²/df = 86.649, d.f. = 2, P < 0.001, CFI = 0.978, GFI = 0.995, AGFI = 0.975, RMSEA = 0.068). All standardized loadings are significant at the P < 0.001 level.

**Brand consumption**

Using yes/no responses, respondents indicated the brands they had used during the preceding 12 months; multiple responses were allowed. We examined two low-involvement products, toothpaste and shampoo, and two value-expressive products, casual shoes and beer. The brands listed in the survey included major foreign and local brands. In China: 36 brands of toothpaste; 59 brands of shampoo, 35 brands of casual shoes, and 62 brands of beer. We arranged the brands by product category and listed them alphabetically using Chinese pinyin. The only additional ‘brand’ that the respondents indicated they had consumed was ‘generic’ (no brand). One of the authors, a native of China, categorized the list into foreign and local brands and included generics within the local category.

We categorize users of the respective products into foreign and local users and define these groups such that foreign users have used at least one foreign brand in that category during the year. Therefore the foreign users group includes those who use foreign brands exclusively and those who use a mix of foreign and local brands, whereas local users use local brands exclusively. We classify the mixed mode as foreign users because very few respondents used foreign brands exclusively. To ensure the reliability of our classification scheme, we conducted sensitivity tests with alternative mixes of local and foreign brands: the results of these tests remain consistent, and reflect the brand usage pattern we reveal with our initial classification, in which Global Materialists use more foreign brands than do Modern Realists and Red Guards.

**Materialism across cohorts (H4)**

H4 suggests that (a) Global Materialists are more materialistic than Modern Realists, who in turn (b) are more materialistic than Red Guards. According to our ANCOVA run (with city tier, gender, income, and education as covariates), the results demonstrate a significant brand effect for Global Materialists, Modern Realists, and Red Guards (F(2, 7412) = 104.55, P < 0.001; M² = 10.13, 9.90, 8.96, respectively). Pairwise comparisons show significant mean differences, with the Global Materialists scoring higher mean values than Modern Realists (P < 0.001), in support of both H4a and H4b. The findings show that two covariates — education (F(1, 7412) = 136.74, P < 0.001) and family income (F(1, 7412) = 93.03, P < 0.001) — also exert significant effects.

**Foreign brand usage across cohorts (H5)**

H5 suggests significant differences across cohorts in foreign brand usage, such that Global Materialists have the highest likelihood of using foreign brands. We conduct a series of logistic regressions, one for each product, in which we employ respondents’ brand usage data as the dependent variable (foreign = 1, local = 0, non-users excluded). We also include independent variables in the logistic regressions, namely city tier, education, and family income; as well as gender, marital status (single, married, other), and family size (=1, 2, 3, 4, 5, 6, 7, >7) to serve as proxies for the respondent’s life cycle stage; and housing option (private, rental, firm-owned) and car ownership (yes, no) as proxies for major purchases that could reduce respondents'
level of disposable income. In China, private-owned residences and rental residences require payment at market value, whereas firm-owned residences refer to subsidized housing that generally requires below-market payments. We code cohort, a categorical variable, as an indicator contrast, for which we use Global Materialists as the reference: that is, cohort (1) contrasts Modern Realists and Global Materialists, and cohort (2) contrasts Red Guards and Global Materialists. The remaining categorical data (e.g., family income, housing) also provide indicator contrasts, so that the base level of each variable (e.g., CNY 2000 or below, private ownership) serves as the reference. The regression models are robust, yielding high percentages of correct classifications (60.1-90.2%, Table 5, bottom row).

The results (Table 5) indicate that six of the eight cohort coefficients (2 cohort contrasts x 4 products) register significant effects (P<0.05). Global Materialists are more likely than Modern Realists to use foreign brands of shoes (e<−0.336, P<0.05) and beer (e<−0.359, P<0.01), but not toothpaste (e<−0.009, P>0.05) or shampoo (e<−0.195, P>0.05). They also are more likely than Red Guards to use foreign brands of all four products: toothpaste (e<0.216, P<0.05), shampoo (e<0.394, P<0.05), shoes (e<0.470, P<0.05), and beer (e<0.612, P<0.001). The logit coefficients for the categorical cohort variables indicate that a unit increase in cohort is associated with a δ change in the log odds of foreign brand consumption. For example, compared with a Global Materialist, it is only e<0.336 (60.70) times as likely for a Modern Realist or only e<0.470 (60.63) times as likely for a Red Guard to have used foreign casual shoes during the preceding 12 months. These findings provide partial support for H5a and full support for H5b.

Usage of foreign brands of value-expressive products across cohorts (H6)

H6 suggests that Global Materialists are more likely to use the foreign brands of value-expressive products than are either Modern Realists or Red Guards. We again refer to Table 5, which shows that all four cohort coefficients related to value-

<table>
<thead>
<tr>
<th>Product category</th>
<th>Toothpaste</th>
<th>Shampoo</th>
<th>Casual shoes</th>
<th>Beer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort b</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort (1)</td>
<td>−0.093</td>
<td>−0.195</td>
<td>−0.354*</td>
<td>−0.359**</td>
</tr>
<tr>
<td>Cohort (2)</td>
<td>−0.216*</td>
<td>−0.394</td>
<td>−0.470*</td>
<td>−0.612**</td>
</tr>
<tr>
<td>Socioeconomic variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City size</td>
<td>−0.233***</td>
<td>−0.401***</td>
<td>−0.458***</td>
<td>−0.471***</td>
</tr>
<tr>
<td>Education</td>
<td>0.095***</td>
<td>0.080**</td>
<td>0.029</td>
<td>0.089**</td>
</tr>
<tr>
<td>Family income</td>
<td>0.398***</td>
<td>0.329**</td>
<td>0.342**</td>
<td>0.328**</td>
</tr>
<tr>
<td>Ownership of major items</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home ownership</td>
<td>−0.030</td>
<td>−0.216</td>
<td>0.157</td>
<td>−0.278</td>
</tr>
<tr>
<td>Firm vs private-owned</td>
<td>−0.115*</td>
<td>0.080</td>
<td>−0.071</td>
<td>−0.115</td>
</tr>
<tr>
<td>Car ownership</td>
<td>0.006</td>
<td>0.162</td>
<td>0.390</td>
<td>0.036</td>
</tr>
<tr>
<td>Life cycle stages and gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.324***</td>
<td>0.266**</td>
<td>−0.400***</td>
<td>0.046*</td>
</tr>
<tr>
<td>Marital status a</td>
<td>0.070</td>
<td>0.250</td>
<td>−0.087</td>
<td>−0.296**</td>
</tr>
<tr>
<td>Family size</td>
<td>0.015</td>
<td>0.094</td>
<td>−0.143*</td>
<td>−0.810</td>
</tr>
<tr>
<td>Nagelkerke a²</td>
<td>0.06</td>
<td>0.03</td>
<td>0.07</td>
<td>0.89</td>
</tr>
<tr>
<td>χ² (10 df)</td>
<td>300.84***</td>
<td>96.78***</td>
<td>109.89***</td>
<td>272.30***</td>
</tr>
<tr>
<td>% of correct classification</td>
<td>60.1</td>
<td>90.2</td>
<td>64.6</td>
<td>63.3</td>
</tr>
</tbody>
</table>

*Dependent variable: 1 if the respondent consumed at least one foreign brand in the preceding 12 months in that category; 0 if otherwise.

1Cohort is measured as a categorical variable using the first cohort (Global Materialists) as the reference for contrast with the rest of cohorts.

2City size measures the contrast effect of tier 1 cities (Beijing, Shanghai, Guangzhou, Shenzhen) against others.

3Marital status: 1=single, 2=married, 3=divorced/widowed. a: *P<0.05; **P<0.01; ***P<0.001.
expressive products (2 cohort contrasts) vs. 2 products) register significant effects (P < 0.05). Global Materialists have a higher likelihood of using foreign casual shoes and beer than either Modern Realists (shoes: e^1.63, P < 0.05; beer: e^0.39, P < 0.01) or Red Guards (shoes: e^0.47, P < 0.05; beer: e^0.62, P < 0.01). In contrast, only two of the four cohort coefficients related to low-involvement products register significant effects (P < 0.05). The significant cohort coefficients include those con- trasting Global Materialists with Red Guards (cohort 2, toothpaste; cohort 2, shampoo), but neither of the cohort coefficients contrasting Global Materialists with Modern Realists (cohort 1, toothpaste; cohort 1, shampoo) registers significant effects (P > 0.05). Because the findings pertaining to low-involvement products differ from those pertaining to value-expressive products (cohort 1, casual shoes, P < 0.05; cohort 1, beer, P < 0.01) for the same cohort contrasts, we consider H6a and H6b supported.

In addition to these cohort effects, several inde- pendent variables register significant effects. For example, city tier (P < 0.001, tier 1 cities more likely) and family income (P < 0.001, higher income more likely) register significant effects on all four pro- ducts. Gender registers significant effects on three of the four products: toothpaste (P < 0.001, female more likely), shampoo (P < 0.01, female more likely), and casual shoes (P < 0.001, males more likely).

Cross-national comparisons (H7, H8)

H7 and H8 suggest that unlike baby boomers in the United States, whose spending on home and cars is greater than that of younger Americans, Red Guards are less likely to be owner-occupied or car owners than Global Materialists or Modern Realists. We conduct cross-tabulation tests to assess cohort effects on these variables. The results regarding the housing option show significant differences (Z^2 = 490.41, P < 0.001): more home owners among Modern Realists (45.2 vs 44.6%) and 42.7% for Global Materialists and Red Guards), more renters among Global Materialists (9.8 vs 8.7% and 3.3% for Modern Realists and Red Guards), and more residents of firm-owned housing among Red Guards (53.9 vs 45.5% and 46.1% for Global Materials and Modern Realists). Home own- ership thus reflects an inverted-U pattern across cohorts that peaks with Modern Realists, in con- trast to the upward-sloping pattern in the US housing data, which peaks with baby boomers. These findings provide support for H7a and H7b, in that Red Guards are less likely to own a home than are the other cohorts.

Regarding car ownership, the results also are significant (Z^2 = 20.90, P < 0.001). That is, more Modern Realists (4.5%) own cars than do either Red Guards (3.9%) or Global Materialists (2.9%). The average of 3.9% car ownership in our sample, though low by US standards, is consistent with the national average in urban China (China Statistical Yearbook, 2002). Thus car ownership also suggests an inverted-U pattern across cohorts that peaks with Modern Realists; again, in the United States, the pattern slopes upwards, because it peaks with the baby boomers. These findings also show that Red Guards are less likely than Modern Realists but more likely than Global Materialists to own cars, in support of H8a but not H8b.

We assess the marital status and family size across cohorts to evaluate whether the Red Guards exist in a life cycle stage similar to that of the baby boomers. The results for both marital status (cross-tabulation, Z^2 = 14.934.28, P < 0.001) and family size (ANOVA, F = 19.57, P < 0.001) are significant: 93.4% of Red Guards are married, and their family size (mean = 3.14) is the largest among cohorts in China. These findings suggest that Red Guards appear in a similar life cycle stage to that of the baby boomers in the United States, who also are more likely to be married and have larger families than younger Americans; however, Red Guards are less likely to own a home and/or car than are Modern Realists (home, car) or Global Materialists (home). These findings support our postulate that differences in consumption among Chinese cohorts are probably due to cohort rather than life cycle differences (Table 6).

Conclusions
This study offers a framework that involves historic cataclysmic events, changing institutions, and cohort membership to identify meaningful market segments in China. By retracing and understanding the societal events that have taken place, we identify and validate, with two studies, several segments of consumers in China with different values, attitudes, and consumption behavior. Red Guards, who came of age during the Cultural Revolution (1966-1979), are pessimistic and frugal, consider shopping a burden, and are less likely to use novelty products or foreign brands. Modern Realists, who came of age during the Economic Reform (1980-1991), are materialistic novelty see- kers who consider shopping a leisure activity and
use novelty products regularly. Finally, Global Materialists, who came of age during the globalization of China (1992–), are the most novelty seeking and materialistic and have the highest propensity to use novelty products, especially foreign value-expressive products. These findings show that social institutional changes that arose from cataclysmic events have created distinct cohorts in China, whose life experiences during their critical coming-of-age years continued to shape their values and behavior long after the events took place.

Our study also compares Chinese and American consumers. Whereas Red Guards and baby boomers are of similar ages and life cycle stages, Red Guards are less likely to own homes or cars than are younger Chinese, because these older consumers, who came of age under the pre-reform regime in China, tend to persist in their less materialistic ways and stay in firm-owned, more basic housing. In contrast, the US baby boomers increase their spending on homes and cars relative to younger Americans. These findings demonstrate that at least some cross-national differences in consumption behavior are due to cohort differences. Thus researchers should investigate not only cross-national but also intracultural variations in international markets.

By including cohort membership in their segmentation schemes, international marketing managers could exploit consumers’ age groups, which reflect the events they experienced as they came of age, to facilitate product and communication campaigns. Property managers in China are already drawing on insights from the Global Materialists’ materialistic orientations and targeting the under-30 segment. This group of young consumers, who have been nicknamed

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**Table 6**  
Home, car ownership and life cycle stages across cohorts

<table>
<thead>
<tr>
<th></th>
<th>Global materialists</th>
<th>Modern realists</th>
<th>Red guards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at Study 2 (2000)</strong></td>
<td>18–26</td>
<td>27–35</td>
<td>36–49</td>
</tr>
<tr>
<td><strong>Home/car ownership</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private-owned</td>
<td>44.6%</td>
<td>45.2%</td>
<td>42.7%</td>
</tr>
<tr>
<td>Rental</td>
<td>9.8%</td>
<td>8.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Furnished</td>
<td>45.5%</td>
<td>46.1%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Car ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes 2.8%</td>
<td>4.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Life cycle stages</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>(χ²=14934.28, P=0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>87.2%</td>
<td>20.1%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Married</td>
<td>12.5%</td>
<td>78.6%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Others</td>
<td>0.3%</td>
<td>1.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Family size (π=19.57, P&lt;0.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.96</td>
<td>3.13</td>
<td>3.14</td>
</tr>
<tr>
<td><strong>American cohorts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age in 1999</td>
<td>&lt;25</td>
<td>25–34</td>
<td>35–44</td>
</tr>
<tr>
<td><strong>Indexed spending</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>18</td>
<td>78</td>
<td>106</td>
</tr>
<tr>
<td>Car</td>
<td>53</td>
<td>82</td>
<td>112</td>
</tr>
<tr>
<td><strong>Life cycle stages</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married couples</td>
<td>53%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Baby boomer households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family size</td>
<td>2.62</td>
<td>3.05</td>
<td></td>
</tr>
</tbody>
</table>

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*aBased on results of Study 2.


'home slaves' (Gun, 2006), are keen to own not just a home but a brand new rather than a second-hand home. Similarly, the coffee industry is associating its caffeinated beverage with leisure and fine living to appeal to Global Materialists, who constitute the heaviest coffee drinkers in China (see Study 1 results). In the US, in contrast, older adults remain the heaviest coffee drinkers, even after we take into consideration the Starbucks effect (Wolfe, 2006).

Managers also use insights derived from the Red Guards' nostalgia for the hardships of the Cultural Revolution to design products and persuasive messages. This trend can be seen in the emergence of Cultural Revolution theme restaurants, complete with basic fare and simple decor. Even advertisements have begun to use music and icons from the Cultural Revolution to appeal to a cohort that looks back with mixed emotions to an era of camaraderie and shared sacrifices. Thus an understanding of generational cohorts in China provides marketing managers with insights into this important international market.

Future research directions and limitations

We have examined cohorts' values, attitudes, and behaviors, but we do not measure specifically their perceptions of the life-changing events through which they lived. Further research could include such measures, and examine the mechanisms and processes that link catalyzing events to the cohorts' personal and consumption values, attitudes, and behaviors. Meanwhile, the trend of targeting Red Guards shows that, though cohorts exist because their members feel a sense of shared experience, which they resist through one another, they also continue to evolve as their collective memories become more selective over time. Accordingly, marketing managers should remain aware of the evolving values of the cohorts to which they are marketing.

Our findings show that socioeconomic variables such as income and education exert strong influences on Chinese consumers' foreign brand usage. Similarly, life cycle events such as marital status and family size exert important influences on both Chinese and American consumers' major purchases (except Red Guards). That is, the predicted outcomes are influenced by multiple factors, and cannot be explained entirely by cohort effects alone. Further research should build on these findings, and develop a matrix that includes multiple segmentation bases and different products to identify the circumstances in which a specific variable forms a meaningful segmentation basis for a particular product. The matrix also could offer a more comprehensive understanding of segment characteristics among Chinese consumers, and their similarities and differences in terms of corresponding segments in other countries.

We also acknowledge several limitations to our study. Although we examine potential age confounds (e.g., life cycle stages), our study is limited by the measures included in the database. For example, we lack measures of materialism with proven psychometric properties (Richins and Dawson, 1992). In addition, we investigate primarily Chinese consumers residing in urban areas, and our cross-national comparison is highly restrictive, because our data do not allow for a direct comparison. Additional research should therefore examine the applicability of cohort segmentation in other countries. Although we include multiple products to enhance the reliability of our findings, our study also is limited to the categories of products that we surveyed. Finally, this study could be enriched with longitudinal datasets, as some exemplary work on cross-cultural consumption has shown (Tse et al., 1989).

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Note

1 The years of birth for baby boomers are based on Russell's (1999) categorization.

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