# MODELING LUXURY WINE PREFERENCE: A STUDY OF BUSINESS TRAVELERS FROM CHINA

by

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This research is dedicated to my husband, Dr. Bryan C. Keene. Our eternally-shared values of love, quality time with family and friends, and adventure through life experiences has withstood this test and will continue to define our—and our children's—life.

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## ABSTRACT

Author: Keene, Mark, M. Ph.D Institution: Purdue University Degree Received: December 2018 Title: Modeling Luxury Wine Preference: A Study of Business Travelers from China. Committee Chair: Carl A. Behnke, Ph.D

The purpose of this study was twofold: Part 1, to empirically develop and statistically analyze a new model that measures the culture-based motivators to consume luxury wine by business travelers that identify as culturally-Chinese; and Part 2, to validate the new model. Luxury wine stakeholders may often have issues accessing luxury wine and providing the ideal choices that appeal to the business traveler from China, and yet there is a larger concern. In a field with a significant lack of research, it is a challenge for global stakeholders to gather information, acquire and implement cross-cultural competence, and remain knowledgeable of the most important motivators for Chinese consumers to pursue luxury wine in an environment of accelerated consumption. The intent of developing and validating this model was so that the resulting developmental process might be adopted by other researchers who wish to explore the psychological, culture-based motivators to consume luxury products by those that identify as culturally-Chinese, including, but not limited to, wine. The model provides stakeholders with culture-based knowledge to meet, or transcend, their consumers' luxury wine purchasing, tasting, and presenting needs. It also addresses gaps in research literature surrounding luxury product consumption, such as emerging markets, global affairs, Chinese (Eastern) versus Euro-American (Western) perspectives, and consumer sociodemographics. Interdisciplinary scale development and inventory tests followed by hospitality-specific, culture-based scale development and item development literature were reviewed and deduced for model development. The scale underwent validity and reliability tests; through a rigorous scale development procedure that tested theory, the scale became a model. The findings and implications are discussed and recommendations for future research are offered.

# **CHAPTER 1. INTRODUCTION**

#### **1.1 Nature of the Problem**

Chemical analyses of ancient organic matter absorbed into pottery jue (wine vessels) from the remote, early Neolithic village of Jiahu (Han people or other minority) in Henan province located in central China revealed that a blended beverage of grain, fruit, and honey was being produced as early as the seventh millennium Before the Common Era (B.C.E.) (McGovern et al., 2004). McGovern et al. (2004) made a strong allegation that this beverage was fermented or alcohol-based; these assumptions are still undergoing further analysis. While rice was likely cultivated in the Huai River region or near the Yangtze River in southern China, the fruit's pedigree is more mysterious (Maclean, 2002). It may have been hawthorn fruit, quince, and/or the grape species vitis adstricta or bryoniifolia, similar to today's vitis species of common grape wine called *vitis vinifera* (including varietals like chardonnay and cabernet sauvignon). Regardless, this prehistoric drink led the way for uncommon cereal beverages—from the protohistoric period (second millennium B.C.E.)—that were remarkably conserved as liquids inside sealed bronze and other earthenware vessels, called Bell Beakers, found in several archaeological sites of the Shang and Western Zhou Dynasties (Kupfer, 2010). McGovern et al. (2004) findings provide evidence of fermented beverages in ancient Chinese culture, and these libations appear to have held considerable religious, social, and medical significance.

From the creation, use, and burial of the ancient Chinese Bell Beakers to the Prohibition era in the United States, the purpose of alcohol—its cultural meaning and societal function—has markedly changed. Wine, specifically alcohol made from grapes, has played an important role in defining global culture. An example includes Riverland region of South Australia's Banrock Station Winery, which has developed a wine-based culture focused on environmental conservation (Pugh & Fletcher, 2002). Another example is the development of a heritage-based wine-culture in the Bohai Bay wine region of Shandong, China (Zhang Qiu, Yuan, Haobin Ye, & Hung, 2013). Wine has become a sophisticated lifestyle product and forms part of a civilized life.

Today, wine continues to influence modern human culture and is often revered for its association with luxury and decadence (Li, 2013). The luxury wine market was valued at \$812,108,000 in 2015 and is expected to reach \$1,122,578,000 by 2022, growing at a

compounded annual rate of 4.8% from 2016 to 2022 (Allied Market Research, 2017). An integral factor in the growing profitability of the luxury wine market is the connections between and across global cultures. An individual's cross-cultural competence (3C), especially while travelling and consuming luxury wine, is a measurable result of globalization. There are culture-based antecedents that influence an individual to consume luxury wine. Previous literature groups these antecedents to wine preference under major cognitive, affective, and behavioral themes or factors. In turn, these factors are tied to nations and cultures, even family clans. Business travelers from China, for instance, exhibit cultural antecedents to preference grounded in their national culture.

Culture reflects the underlying beliefs, assumptions, and values of a collective—it is a complex phenomenon. This study proposed to validate cultural factors specific to certain areas of consumption, particularly luxury wine, resulting in a model of culturally-linked, wine-related preferences. Subsequently, this dissertation proposed to develop an instrument that measures these culture-based motivators to consume luxury wine. To this end, a pool of independent variables were gathered, scales were constructed, and data was collected to build and enhance literature regarding culture-based wine motivators to consume, while responding to a current wine industry challenge.

#### **1.2 Statement of the Problem**

Global wine industry business models are having difficulty meeting the increasing consumption and changes in Chinese wine demand (Mowery, 2015; Osorio, 2017; Pesme, 2017). China's rising wine consumption levels have been interpreted as strong growth in wine imports over the last few years, leading to global stakeholder entrepreneurialism (Thorpe, 2009). Moreover, due to the rapid pace of consumption change, wine market business models are not evolving quickly enough to keep up with China's demand (Osorio, 2017). Wine stakeholders are engaging with government and decision-makers to increase the industry's competitiveness and meet the needs of the Chinese consumer (Pesme, 2017). Globally, Chinese nationals are the preeminent purchasers of upscale goods, and they hold foreign brands in high admiration, specifically those with heritage appeal (Mowery, 2015). While this preference applies across all areas of consumerism, it certainly holds true for certain spirit categories and wine; for instance, in the last few years the Chinese people have set new records, becoming ravenous consumers and

collectors of cognac and Bordeaux wine (Halstead, 2014; Moselle, 2014; Mowery, 2015; Noppé, 2012). Factors such as emotional ties to traditional ways of thinking, an adventuresome spirit, extraversion, and empathy are specific culture-based factors that may lead a business traveler who identifies as culturally-Chinese to consume luxury wine. Luxury wine stakeholders may often have issues accessing appropriate quality wine and providing choices that appeal to the business traveler from China, and yet there is a larger concern: in a field with a significant lack of research, it is a challenge for global stakeholders to gather information, acquire and implement cross-cultural competence, and remain knowledgeable of the most important motivators for Chinese consumers to pursue luxury wine in an environment of accelerated consumption (Moselle, 2014; Pesme, 2017).

#### 1.3 Purpose and Objectives of the Study

The purpose of this study was twofold: Part 1, to empirically develop and statistically analyze, through model development literature and an Exploratory Factor Analysis (EFA), a new model that measures the culture-based motivators to consume luxury wine by business travelers that identify as culturally-Chinese; and Part 2, to validate the new model using Confirmatory Factor Analysis (CFA). Therefore, following are the study's four research questions:

- RQ1 Which culture-based <u>items</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ 2 Which culture-based <u>factors</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ3 What is the evidence of <u>reliability</u> for an instrument that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ4 What is the evidence of <u>validity</u> for an instrument that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?

### 1.4 Significance of the Study

Global luxury wine stakeholders and suppliers meet, yet often fall short of, Chinese luxury wine demand; the supply must be increased. Furthermore, they should make available specific choices—to purchase, taste, or present—that not only meet, but surpass their consumers' needs. They must rely on culture-based, consumption motivators that exceed the behavioral, attitudinal, and perceived needs of their consumers in order to expand their market. The results of this study will provide the stakeholders with culture-based knowledge to meet, or transcend, their consumers' luxury wine purchasing, tasting, and presenting needs.

The results of this study will address gaps in research literature surrounding luxury wine motivators to consumption, such as quality and quantity standards, emerging markets, global affairs, Chinese (Eastern) versus Euro-American (Western) perspectives, consumer sociodemographics, international production policies, consumer behavior, brand building and maintenance, packaging, price thresholds, wine service environment and experience, wine tourism branding, and business traveler marketing strategies. Finally, this study's model development process, if adopted, will benefit researchers that study subjects who identify as culturally-Chinese.

### 1.5 Delimitations of the Study

This study was constrained somewhat with respect to the population, sample, subject experience, demographic requirements, researcher bias, survey technology, and instrument development. The population sample was recruited using one online survey platform, which was initially extended through two approaches: an online marketplace for work that requires human intelligence (MTurk) and an online community of industry professionals via electronic mail (email). These subjects were likely more homogenous than the general population of business travelers that identify as culturally-Chinese. In addition, this sample was purposive in focusing on subjects with a declared interest in luxury wine, not an interest in alcohol-based beverages as a whole. While the subjects may have had exposure to luxury wine, they were also expected to offer their opinions as business travelers.

Regarding subject expertise, the information gathered was focused narrowly on four demographic participant prerequisites: (1) be at least 21 years of age, (2) identify as culturally-Chinese, (3) have consumed wine at least once in the past year, and (4) travel for business. Given that beverage management was the primary researcher's field of expertise, there was potential for bias (Gall, 1996). To negate this possibility, the scale development process followed literature-based developmental sequencing. Access to, and comfort with—purchasing, tasting, and presenting—wine was a prerequisite for participation in this study. Subjects were expected to have an average understanding of how to complete an online survey regarding wine

characteristics that motivate consumption (consumption described as purchasing, tasting, and/or presenting); a limited comprehension of acceptable socio-cultural-based luxury wine preferences; and a familiarity with the most critical luxury wine consumption attributes (drawn from values of philosophy, identity, culture, society, heritage, and health).

The information was gathered using a web-based survey platform. Subjects were introduced to the intent to gather information, requested only to proceed if they met the aforementioned demographic prerequisites, and voluntarily chose to select a link that immediately transferred to the survey platform. The data were gathered based upon previous experience and did not require additional experience or proficiency. The instrument was designed to measure culture-based luxury wine motivators to consume, in addition to relevant demographic data. The instrument was self-reporting and, therefore, potentially subject to bias. In order to minimize, or eliminate, possible bias, the instrument underwent a sequence of reliability and validity requirements.

The status quo of measurement development in the social sciences in general and in empirical hospitality research—although the quality of empirical measures has improved over the past decades—is still inhibiting researchers from attaining the most valid cumulative knowledge in the hospitality domain (Dolnicar, 2013). A key concern shared by many social science measurement development researchers is data contamination by response styles which lead to a prevalence of outliers (Dolnicar, 2013). There are two concerns surrounding a response style. First, the researcher may delete a response prior to data analysis. Responses were identified for removal prior to analyses in this study, however, analyses tests were employed by the software to remove outliers. Second, if this response is impossible to remove, or was missed prior to the analysis, then is it integral to choose answers that will reduce—in the first place—the likelihood of capturing a response style. Cronbach (1950) precisely states, "Since response sets [styles] are a nuisance, test designers should avoid forms of items which response sets infest" (p.21).

A notable limitation of the model was that it measured the perception of luxury wine consumption instead of observable luxury wine consumption. Perceptions were based on the subject's personal opinion that may vary depending on many attributes such as work title, business environment, personality, and attitude of the subject reporting. Measurement bias, such as social desirability, posed limitations based on perception. Dolnicar (2013) states social desirability bias as the tendency of subjects to answer questions in a manner that will be viewed favorably by others. This bias interferes with the interpretation of average tendencies as well as individual differences, especially in questionnaires (Puppatz, Burmeister, & Deller, 2017). The instrument used self-completion, a random model of answering, and no right or wrong to limit social desirability bias (Dolnicar, 2013). Yet, social desirability as a factor and at an item level may attribute to artificial variance for the model. Further steps were taken to minimize overall sampling bias and improve measurement development. Lee, Soutar, and Louviere's (2006) bestworst scaling was implemented in this study's instrument supported by Kampen and Swyngedouw's (2000) recoding, or reclassifying of ordinal scales into different types. All scale points were kept equidistant according to Dolnicar (2013) and scaffolded by "pick any" option for each survey question (Dolnicar & Grün, 2013; Rossiter, 2011; Rossiter, Dolnicar, & Grün, 2010).

Finally, other bias considerations were made when developing response choices for the instrument. The survey was kept as short as possible to reduce fatigue (less than 15 minutes), increase quality, and participation rates (Hardy & Kosomitis, 2005; Johnson, Lehmann, and Horne, 1990; Rossiter, Dolnicar, & Grün, 2010). Midpoints were implemented to accommodate the unipolar attributes when beliefs were measured (Dolnicar, 2013). All responses were numerically coded to correctly reflect the polarity of each scale as stated by Dolnicar (2013).

Instrument translation and retranslation was conducted for linguistic equivalency and to assure appropriate language translation (Dolnicar, 2013). More specifically, Puppatz, Burmeister, and Deller's (2017) functional equivalency was observed to convey the actual meaning because the behaviors mentioned in some or all of the items do not generalize across cultures. Nichols, Padilla, and Gomez-Maqueo's (2000) metric equivalency was employed to find equity in the manifestation of similar psychometric properties (distributions, ranges, etc.) across cultures—this study used the same seven-point Likert scale for all item question response styles. Furthermore, concept equivalency was observed to ensure the instrument measures the same construct across cultures, it many ways, related to the construct validity of the instrument (Puppatz, Burmeister, & Deller, 2017).

### **1.6 Impact of the Study**

The results of this study will help stakeholders target luxury wine selections (a single 750-milliliter bottle that may be purchased for CNY ¥680+ [USD \$100+]) that appeal to business travelers who identify as culturally-Chinese. The intent of developing and validating this model was so that the resulting developmental process might be adopted by other researchers who wish to explore the psychological, culture-based motivators to consume luxury products by those that identify as culturally-Chinese, including, but not limited to, wine. The results may also be implemented by industry stakeholders to create customized promotions to match consumer needs. Lateral research potential of this study will contribute to investigative literature and impact the following topics within the domain:

- Motivation and intention to purchase wine while travelling;
- Increasing the capability to compare consumers across different cultures and markets;
- Understanding and improving the culture-based wine tourism value chain;
- Innovation in wine marketing; wine tourism and social practices;
- New insight into the wine tourism behavior of the business traveler;
- Insights into cross-cultural behavior;
- Cross-cultural instrument development;
- Influence of social media on wine tourism;
- Destination branding of wine and culinary tourism;
- Mapping consumer trends and changes;
- Adaptability of the business traveler to new wine tourism business models;
- Destination marketing for emerging wine tourism clusters;
- Refining cultural wine preference; and
- Wine tourism in emerging wine regions.

Luxury wine stakeholders that will be positively affected by this study include the following: wholesalers, retailers, distributors; marketers and strategists; business travelers; Meeting, Incentive, Conference, and Event (MICE) organizers; and hospitality managers and entrepreneurs. Simply put, the three wine tourism stakeholders are (1) those that package, offer, and sell wine (traditional wholesalers, distributors, and retailers), (2) those focused on the

traveler, and (3) those who seek entrepreneurial solutions. This study begins with an empiricaland theoretical-founded review of literature about wine preference, *The Chinese Phenomenon*, and cross-cultural theory to determine the dimensions that will guide the model's development.

## **CHAPTER 2. REVIEW OF THE LITERATURE**

The literature review includes three over-arching areas: (1) an examination of the evolving nature of global wine preference; (2) an exploration of China's culture-based, socioeconomic rise and influence both globally and locally in the wine industry, called *The Chinese Phenomenon*; and (3) an analysis of the Chinese consumer through cross-cultural theory. All topics explored in this introduction are integral to the scale development; that is, variables for the development of the luxury wine model were founded on concepts from research discussed in these three areas.

#### **2.1 Wine Preference**

### 2.1.1 Influential changes in the wine industry

Grasping a clear understanding of contemporary wine preference begins with the exploration of four topics: 1) recent changes in the wine industry, 2) key interdisciplinary literature relevant to this study, 3) wine preference research, and 4) future industry research. Over the last 20 years, there have been numerous influential changes in the wine industry; however, the most significant changes are the following: *phylloxera* and disease pests, climate change and its relationship to sound agricultural production, a transition from Old World to New World style preference, and the importance of innovation and entrepreneurialism resulting from globalization and highlighted by China's increasing influence.

#### 2.1.1.1 Phylloxera

A disastrous example of the consequences of inadvertent pest dispersion is found in the inauguration of *phylloxera* from North America to Europe in the mid-1850s (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). This root aphid annihilated the European *vitis vinifera* rootstock and table wine industry, which lacked the advanced resistance found in native North American grape species. The European wine economy of the late 1800s was based largely on distribution and production, and *phylloxera* had a crippling economic impact. The problem rapidly traversed across the continent. Markedly, in France, total wine production decreased from 84.5 million hectoliters in 1875 to only 23.4 million hectoliters in 1889 (Banerjee, 2010). Some estimated that between two-thirds to nine-tenths of all European vineyards were

destroyed (Gale, 2011). The concern was resolved by an extensive rootstock breeding and evaluation effort using the North American grape species in hybrid combinations to battle *phylloxera* resistance and manage resilience to soil variations and expedite propagation (Gale, 2011). This effort involved all wine-producing countries and it continues, albeit on a smaller scale, to this day. While diseases and pests know no national borders, climate change shares a similar, global influence in the wine industry.

## 2.1.1.2 Climate Change

Studies on the wine industry and climate change cross multiple areas. Research has addressed the impacts of climate change on wine quality, grapevine yield and phenology, and vineyard site suitability analyses, either implicitly or explicitly discussing the concept of *terroir* (Holland & Smit, 2010). Conversely, research gaps and opportunities to refine global enology and viticulture are still prevalent. Gaps to be addressed include: the vulnerability of viniculture and viticulture as a domain to conditions beyond climate and temperature, the flexible capacity of the wine industry, and adaptive management operations strategies.

Meeting the research and agricultural needs resulting from the effects of climate change requires sound agricultural production (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). As consumer awareness increases about the susceptibility of our global environment, the demand for proven agricultural production methods is increasing. In the near future, the idea of the producer as a conscientious environmental steward will be a critical influence on the consumer's purchasing decision (Ashenfelter, 2016). This concept is explained by the fact that the common wine consumer is affluent and well educated. The wine industry has taken a leadership position in the establishment of international associations of producers, governments, and scientists to reach consensus on the practices that should be followed for products intended for the international marketplace (Ashenfelter, 2016; Moser & Boykoff, 2013). These associations are developing farming protocol guidelines that limit the impact of site-development issues, such as removal of native vegetation, erosion, and water use (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). The farming practices also address pest and disease control and promote pesticide applications that have the lowest possible environmental impact while supporting efficacy (Moser & Boykoff, 2013). Although climate change and the need to modify agricultural production are factors today's wine consumer rarely considers during a purchase. Other intrinsic

elements, such as sensory-dominated wine preferences, have always been central to the industry's success. One of these important preferences is the change from Old to New World styles of wine.

### 2.1.1.3 Transitioning Preference from Old to New World Style

There has been a transition from Old World to New World style preferences in contemporary wine consumers. Old world style is perceived as lighter tasting, lower in alcohol, more acidic, and less-fruity and includes countries geographically located in Europe, such as France, Italy, Spain, Portugal, Greece, Austria, Hungary, and Germany. Conversely, New World styles of wine are perceived as tasting riper, higher in alcohol, less acidic, and more-fruity and includes countries from around the world, such as the United States, Australia, South Africa, Chile, Argentina, and New Zealand. In the last third of the twentieth century the global wine market became significantly more competitive (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). Consumption declined in the traditional wine-consuming and -producing nations, while competition emerged from such New World nations as Chile, Australia, and the United States, with affluent consumers choosing quality over quantity (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). New World producers were fierce to respond to global perceptions of quality, and gained notable market share over the past 20 years, moving from 2% to 15% of the world export market, largely at the expense of the European producers (Bisson, Waterhouse, Ebeler, Walker, & Lapsley, 2002). Although Old World countries still hold their position as top producers of wine, they are increasingly concerned with a widening gap between domestic consumption and production of wine (Campbell & Guibert, 2006). Bernetti, Casini, and Marinelli's (2006) study found that globalization has boosted competition between Old and New World producers, striking the need for Old World producers to differentiate their product through the combination of tradition, innovation, and entrepreneurialism.

### 2.1.1.4 Globalization of the Chinese Wine Industry

As a result of the changing global consumption and production patterns, a surplus production problem prevails primarily at the lower quality end in many nations. Yet, reflecting the structural changes occurring globally, world trade in wine has flourished significantly over the past decade (Thorpe, 2009). Thorpe (2009) posits that world consumption grows and changes relatively slowly compared to the potential for continued expansion (and diversification) in wine production, which results in an intensification of global competition. This intensification will inspire innovation and expand business. The competitive strengths of complex, varied, and traditional European wine culture are far from being exhausted (Bernetti, Casini, & Marinelli, 2006). There is a strong tendency among the young, new wine managers with both an eye on tradition and on the new market possibilities presented by innovation to give wine products and tourism the right "local feel" that is inspired by the provincial culture (Bernetti, Casini, & Marinelli, 2006). At the same time, wine exporters are increasingly looking for aspiring markets, with Asia seen as having good potential (Thorpe, 2009). Particularly, China's rising wine consumption, especially within the luxury wine market, has catapulted into a global wine consumption leadership role (Pesme, 2017; Winechina, 2017).

## 2.1.2 Interdisciplinary Research

Key topics in past theory represent common threads through wine industry literature. Furthermore, these topics are continuously studied because they serve as the underpinning of industry research. This existing research serves as a preamble to the three dimensions of the literature review. Good examples of this research involve wine consumer behavior and wine sensory preferences. Of course, past theory must be examined for reliability and to accommodate market changes, research needs, and industry trends; therefore, past theory will form an integral part of this current study. Yet, there are several studies that simply do not warrant further research since they have been exhaustively covered (Lockshin & Corsi, 2012; Mueller Loose & Lockshin, 2013; Velikova, Howell, & Dodd, 2015). These studies include the role of price, brand, region, grape variety, and awards; comparisons of Old and New World styles; segmentation of wine consumers; and the value of sustainable or 'green' wine practices to consumers. Conversely, there are several areas ("future" topics) that warrant scrutiny in this current study.

Research gaps emerged following a review of relevant literature that included the wine industry and extended into related industries. Below is the collection of interdisciplinary topics from leading authors' "future studies" recommendations and results of implications. Content from this literature informed the subsequent development of items for this study and is organized under six major groups.

The first major group, gathered under the *cross-cultural antecedents to preference*, entailed items about culture and preferences (Song, 2012); cross-national choice attributes (Lockshin & Cohen, 2011; Lockshin, Quester, & Spawton, 2001; Mueller Loose & Lockshin, 2013); wine-related lifestyles (Bruwer & Li, 2007, 2017; Oh & Hwang, 2018); wine and wellbeing, health, and self-medication (Higgins & Llanos, 2015; Seligman, 2012; Swendsen, Tennen, Carney, Affleck, Willard, & Hromi, 2000); cross-national behavior (Goodman, 2009); anti-cross culture validation (Epstein, Santo, & Guillemin, 2015); and cross-cultural competence test (Matsumoto & Hwang, 2013)

The second major group, gathered under the topic of *retail marketing*, entailed items about premium and luxury wine (Lockshin, Corsi, Cohen, Lee, & Williamson, 2017); new emergers (Lockshin, Corsi, Cohen, Lee, & Williamson, 2017; Thach & Olsen, 2004); retail market comparisons (Goodman, 2009); cross-category buying and purchasing (Lockshin, Corsi, Cohen, Lee, & Williamson, 2017); time spent between purchases (Dodd, 2002; van den Poel & Buckinx, 2005); grocery stores (Grunert, Perrea, Zhou, Huang, Sørensen, & Krystallis, 2011); influence of price promotion toward added value (Bowie, Buttle, Brookes, & Mariussen, 2016); visual presentation cues and physiological attributes most likely noticed (Barber, 2005); menu position and placement (Hammond, Velikova, & Dodd, 2013a); out-of-stock management (Dodd, 1995; Sloot, Verhoef, & Franses, 2005); destination image (Lee & Lockshin, 2011); penetration versus purchase frequency (Lockshin & Corsi, 2012); online versus offline leads to new product and retailing strategies (Dodd, 2010; Parboteeah, Taylor, & Barber, 2016); and social media and categories versus brands (Fischer, Völckner, & Sattler, 2010; Munar, 2013).

The third major group, gathered under the topic of *on- and off-premise consumer behavior*, entailed items about occasion, imported luxury, social status attitude versus behavior, perception, and saying versus doing (Hammond, Velikova, & Dodd, 2013b; Taylor & Barber,

2016); attitude and values (Rahman, 2014; Rahman & Reynolds, 2017); relationship between grape and wine quality against consumer behavior (Sáenz-Navajas, Ballester, Pêcher, Pevron, & Valentin, 2013); wine expertise and knowledge (Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Sáenz-Navajas, Ballester, Pêcher, Peyron, & Valentin, 2013); cognitive approach to lifestyle (Brunso & Grunert, 1995); wine experience (O'Neill, Palmer, & Charters, 2002; Quadri-Felitti & Fiore, 2012; Sparks, 2007); previously tasted or bonded (Bernabeu, Diaz, Olivas, & Olmeda, 2012; Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Lockshin & Knott, 2009); brand love and brand loyalty ((Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Jarvis, Rungie, & Lockshin, 2007); food-related lifestyle trends (Bruwer & Li, 2007; Reid, Li, Bruwer, & Grunert, 2001); food and wine pairing (Hammond, 2007; Martinez, 2015; Taylor & Broz, 2015); planned versus impulse purchasing (Dodd, 1996; Hausman, 2000); purchase intention and influencers (Barber, Taylor, & Deale, 2010b; Goodman, Lockshin, & Cohen, 2006, 2008); repeat purchase (Jarvis, Rungie, & Lockshin, 2007); awards obtained (Corsi, Mueller, & Lockshin, 2012); willingness to pay (Barber & Taylor, 2013; Orrego, Defrancesco, & Gennari, 2012); on-premise leads to private consumption (Lacey, Bruwer, & Li, 2009); promotional effects (Graeff, 1996); wine list size (Corsi, Mueller, & Lockshin, 2012); wine list organization (Cohen, Lockshin, & Sharp, 2012; Kim, 2016; Sirieix, Remaud, Lockshin, Thach, & Lease, 2011); recommendations (Dewald, 2008); employee service, persuasion, and cleanliness and service management (Barber, Goodman, & Goh, 2011; Dewald, 2008; Henrie & Taylor, 2009; Lee, Lee, & Dewald, 2016; Taylor & Barber, 2012); and destination and vacation and happiness (Chen, 2011; Trembath, Romaniuk, & Lockshin, 2011).

The fourth major group, gathered under the topic of *perception and attitude*, entailed items about attitude, convictions, and beliefs (Carr, Shin, Severt, & Lewis, 2017); ethnic cues (Khan, Lee, & Lockshin, 2015); globalization (Anderson, 2004; Anderson & Pinilla, 2018); wine knowledge (Velikova, Howell, & Dodd, 2015); wine education (Taylor, 2009; Taylor, Dodd, & Barber, 2008); brand satisfaction and trust (Beverland, 2006; Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015); and bloggers and Twitter (Marlowe, Brown, Schrier, & Zheng, 2017).

The fifth major group, gathered under the topic of *luxury brands and premium wine*, entailed items about luxury defined (Cohen, Corsi, Lockshin, Bruwer, & Lee, 2017; Sjostrom,

Corsi, & Lockshin, 2014); emerging markets (Bouzdine-Chameeva, Hanf, & Zhang, 2016; Lockshin, Corsi, Cohen, Lee, & Williamson, 2017); quality versus quantity and oversupply (Sjostrom, Corsi, & Lockshin, 2016); emerging consumers and consumer sociodemographic (Cai, 1996; Cuomo, Tortora, Festa, Giordano, & Metallo, 2016); international production policies (Lockshin & Corsi, 2012); premium versus regular (Lockshin, Corsi, Cohen, Lee, & Williamson, 2017); behavior (Smith, Farrish, McCarroll, & Huseman, 2017); brand (Orth, Limon, & Rose, 2010); packaging (Barber, Ismail, & Taylor, 2007; Barber, Taylor, & Deale, 2010a; Mueller, Lockshin, Saltman, & Blanford, 2010); price points (Orrego, Defrancesco, & Gennari, 2012); tourism branding (Cai, Gartner, & Munar, 2009; Taylor, Barber, & Deale, 2010; Zhang, 2016); built or maintained (Lockshin & Corsi, 2012; Morrison & Rabellotti, 2017); and marketing strategy (Dolan & Goodman, 2017; Tomažič, 2017).

The final and sixth major group, gathered under the topic of *instrument development and analyses*, entailed studies pertaining to the development of measurement tools for more accurate consumer analysis (Bruwer & Gross, 2017; Thomas, Quintal, & Phau, 2018); cross-cultural comparison of scale means (He et al., 2017); cross-cultural validation in a new cultural setting (Adler & Graham, 2017; Brunso & Grunert, 1995; Reid, Bruwer, & Grunert, 2001, 2001); and food-related lifestyles leads to concrete attributes (Reid, Bruwer, & Grunert, 2001).

#### **2.1.3 Wine Preference Research**

Wine preference-specific literature was gathered for its pertinence to this study (see Table 1). This information is provided in two columns. The left column represents the area/concentration of wine preference. The right column supplies the peer-reviewed articles related to the area of focus. These columns offer information side-by-side in order to clearly see the related articles that contribute to the top areas of wine preference research. Only those items that were directly related to culture-based antecedents were adopted for the scale development.

Country specific behavioral surveys: Literature that studies country-specific consumer behavior and preference. Cross- national studies are in this area. Culture-based scale and instrument development: Studies that explore the progress of scale development for one and more than one culture. Green issues: Studies focused on sustainability, organics, biodynamics, biodiversity, environment, and the influence of these green issue certifications on wine preference and consumer behavior. Lifestyle and generations: Literature that broadly segments target markets into activity- based wine lifestyles, such as food-based or wine award-based lifestyles, and generations. This is a sub-area of social science, values,	<ul> <li>Bernabeu, Diaz, Olivas, &amp; Olmeda, 2012; Casini, 2009; de Magistris, Groot, Gracia, &amp; Luis Miguel, 2011; Goodman, 2009; Goodman, Lockshin, &amp; Cohen, 2008; Liu &amp; Murphy, 2007; Lockshin &amp; Cohen, 2011; Melissa &amp; Christodoulidou, 2011; Mueller &amp; Rungie, 2009; Smith, Farrish, McCarroll, &amp; Huseman, 2017</li> <li>Achenbach et al., 2008; Bouckenooghe, Devos, &amp; van den Broeck, 2009; Cheung, Leung, Fan, Song, Zhang, &amp; Zhang, 1996; Hammer, 2011; Lieber, Fung, &amp; Leung, 2006; Puppatz, Burmeister, &amp; Deller, 2017; Wong, Wu, Guo, Lam, &amp; Snowden, 2012</li> <li>Barber, Taylor, &amp; Strick, 2009; Barreiro-Hurlé, Colombo, &amp; Cantos-Villar, 2008; Brugarolas Mollá-Bauzá, Martínez-Carrasco Martínez, Martínez Poveda, &amp; Rico Pérez, 2005; Forbes, Cohen, Cullen, Wratten, &amp; Fountain, 2009; Fotopoulos, Krystallis, &amp; Ness, 2003; Lesschaeve, Bowen, &amp; Bruwer, 2012; Olsen, Thach, &amp; Nowak, 2007; Remaud &amp; Lockshin, 2009; Stolz &amp; Schmid, 2008</li> <li>Brunsø &amp; Grunert, 1995; Bruwer, 2002; Bruwer &amp; Li, 2007; Bruwer, Saliba, &amp; Miller, 2011; Charters &amp; Pettigrew, 2007; Reid, Li, Bruwer, &amp; Grunert, 2001; Ritchie, 2007; Smith, 2007; van Zanten, 2005</li> </ul>
and segmentation.Luxury brand: Studies on the effects of brand and pricing processes on wine preference and behavior.Inter-, cross-, and multi-culture: Studies where more than one, or more than one culture, are compared in terms of wine	Cohen, Corsi, Lockshin, Bruwer, & Lee, 2017; Corsi, Mueller, & Lockshin, 2012; Orth, Limon, & Rose, 2010; Reyneke, Pitt, & Berthon, 2011; Sjostrom, Corsi, & Lockshin, 2014 Epstein, Santo, & Guillemin, 2015; Goodman, 2009; Khan, Lee, & Lockshin, 2015; Lockshin & Cohen, 2011; Lockshin, Quester, & Spawton, 2001; Matsumoto & Hwang, 2013; Mueller Loose & Lockshin, 2013; Song, 2012
preference and purchasing behavior.Online wine purchasing: Articles focusing on online purchasing behavior, including segmentation, or barriers to purchasing online.	Barber, Taylor, & Deale, 2010b; Bressolles & Durrieu, 2010; Goodman, Lockshin, & Cohen, 2006, 2008; Harridge-March & Quinton, 2005; Kolyesnikova, 2010; Quinton & Harridge-March, 2008; van Zanten, 2005

Table 1 continued

Provenance and wine lists: Literature	Adinolfi, De Rosa, & Trabalzi, 2011; Atkin & Johnson, 2010; Balestrini & Gamble,
focusing on the effect of country, region,	2006; Nelson Barber, Goodman, & Goh, 2011; Brown & O'Cass, 2006; Bruwer &
brand, price, recommendations, wine lists	Johnson, 2010; Cohen, Lockshin, & Sharp, 2012; Dewald, 2008; Drennan, Bianchi,
organization, and service management, on	Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Easingwood, 2011; Espejel,
wine preference and choice.	2011; Espejel & Fandos, 2009; Famularo, Bruwer, & Li, 2010; Felzensztein &
	Dinnie, 2006; Henrie & Taylor, 2009; Heslop, Cray, & Armenakyan, 2010; Hu, Li,
	Xie, & Zhou, 2008; Johnson & Bruwer, 2007; Kim, 2016; Lee, Lee, & Dewald,
	2016; McCutcheon et al., 2009; Perrouty, 2006; Remaud & Lockshin, 2009; Santos,
	Malheiro, Karremann, & Pinto, 2011; Sirieix, Remaud, Lockshin, Thach, & Lease,
	2011; Taylor & Barber, 2012
Retail wine purchasing: Wine venue	Barber & Taylor, 2013; Casini, 2009; Drennan, Bianchi, Cacho-Elizondo, Louriero,
literature that measures the willingness to pay	Guibert, & Proud, 2015; Goodman, 2009; Grunert, Perrea, Zhou, Huang, Sørensen,
and purchase as influenced by personal	& Krystallis, 2011; Hollebeek, Jaeger, Brodie, & Balemi, 2007; Jarvis, Rungie, &
characteristics, such as purchasing contexts,	Lockshin, 2007; Munar, 2013; Parboteeah, Taylor, & Barber, 2016; Quinton &
intention, repeat purchasing, price, tasting	Harridge-March, 2008
promotions, or marketing.	
Varietal/style physiology and sensory	Hammond, 2007; Isabelle Lesschaeve, 2007; Martinez, 2015; Mueller & Szolnoki,
analysis: Literature that measures	2010; Orth & Kahle, 2008; Orth, Marianne McGarry, & Dodd, 2005; Sáenz-
physiological items, such as blending grapes,	Navajas, Ballester, Pêcher, Peyron, & Valentin, 2013; Taylor & Broz, 2015; Terrien
color, food pairing, taste, tannin, and	& Steichen, 2008
astringency as influencers to preference.	
Packaging and labelling: Articles focusing	Barber & Almanza, 2006; Barber, Ismail, & Taylor, 2007; Barber, Taylor, & Deale,
on the effects of labelling information and	2010a; Boudreaux & Palmer, 2007; Chrea, 2011; Dimara & Skuras, 2005;
packaging attributes on consumer choice and	Goodman, 2009; Mueller Loose & Szolnoki, 2012; Mueller, Lockshin, Saltman, &
preference.	Blanford, 2010; Orth & Malkewitz, 2008; Sherman & Tuten, 2011
Scale and instrument development:	Bernabeu, Diaz, Olivas, & Olmeda, 2012; Brunsø & Grunert, 1995; Epstein, Santo,
Literature that explores the development of	& Guillemin, 2015; Han, Back, & Barrett, 2010; Jung-Eun & Chon, 2008; Lankford
wine preference scales.	& Howard, 1994; Richins & Dawson, 1992; Ryu & Jang, 2008

Table 1 continued		
Social science, values, and segmentation: Studies	Bernabeu, Diaz, Olivas, & Olmeda, 2012; Brunner & Siegrist, 2011; Bruwer &	
about the influence of attitudinal, societal,	Li, 2007; Bruwer et al., 2011; Carr, Shin, Severt, & Lewis, 2017; Drennan,	
personal value, educational (knowledge-based),	Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Hammond,	
psychological, and sociological factors on	Velikova, & Dodd, 2013b; Lockshin & Knott, 2009; Olsen et al., 2007;	
consumer wine preference or choice.	Rahman, 2014; Rahman & Reynolds, 2017; Sáenz-Navajas, Ballester, Pêcher,	
Segmentation and demographic studies are	Peyron, & Valentin, 2013; Taylor, 2009; Taylor & Barber, 2016; Taylor, Dodd,	
included in this area.	& Barber, 2008; van Zanten, 2005; Velikova, Howell, & Dodd, 2015	
<b>Social media</b> : Literature, including mediums like blogs and WeChat, about the use and effect of social media to explore wine preference and consumer behavior. Qualitative data is included in this area.	Claster, Caughron, & Sallis, 2010; Marlowe, Brown, Schrier, & Zheng, 2017; Reyneke et al., 2011	
Wine tourism and destination: Studies focusing on attitudes and perceptions of winery visitors and wine destinations.	Alebaki, 2014; Barber, Taylor, & Deale, 2010b; Cai, Gartner, & Munar, 2009; Gill, Byslma, & Ouschan, 2007; Kolyesnikova & Dodd, 2008; Lesschaeve et al., 2012; Zhang, 2016	

#### **2.2 The Chinese Phenomenon**

China's culture-based, alcohol consumption was born from historical elements—food, dynasties, religion, war, social, and economic status. It is not only richly complicated and often mysterious, but has supported China's overall rapid global economic growth and prowess, referred to as *The Chinese Phenomenon* (Doctoroff, 2012; Hartley, 2017; Jin, Rousseau, Suttmeier, & Cao, 2007; Lin & Li-Hua, 2008; Zhai, 2018). Economic prowess also describes China's ability to affect the global wine industry as demonstrated by the Chinese wine industry growth over the past decade. To best understand the cultural framework behind the phenomenon and its influence in the luxury wine industry, five key topics will be discussed: (1) Chinese success factors, (2) globalization, (3) important factors behind China's wine industry, (4) the new Chinese consumer, and (5) Chinese (Eastern) versus Euro-American (Western) perspectives.

### 2.2.1 Chinese Success Factors

An exploration of the complex factors that led to this rise of grape-based, alcoholic beverages is not only intriguing, but also beneficial from a research perspective. The rise of fermented grape wine first occurred in the High Tang Dynasty (8<sup>th</sup> century of the Common Era [C.E.]), and continued with a prominent presence in modern Xinjiang (Li, 2013). In Xinjiang, also called Xiyu or "City of the West Region," grape wine had a long history of popularity until the adoption of Islam, which halted production from the late 10<sup>th</sup> century C.E. through the 18<sup>th</sup> century C.E. through political persecution and wars (Eduljee, 2005). The rationale behind researching the modern revival and expansion of both wine production and consumption in China, not to mention the rising economic power as represented by *The Chinese Phenomenon*, is founded upon major success factors. The following five culture-based, socioeconomic Chinese success factors provide a clearer understanding of the psychological motivators to consume luxury products, including wine:

 China's capability to boost domestic consumption, intentional increase of per capita wine consumption as a result of state-wide marketing based on the health benefits of wine over baijiu, streamline its wine industry revenue, and increase industry success factors and international trade, position it as an emerging leader (Doctoroff, 2007, 2012; IBISWorld Industry Report [IBIS], 2017; Jacques, 2012);

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- China's capacity to defeat global challenges through the mobilization of national resources is exceptional—particularly observed with the marked expansion of national wine production (Doctoroff, 2012; Friedman, 2005; Pesme, 2017);
- China's Daoist, Maoist (Mao Zedong Thought), and especially Confucian values of harmony, clan, and a universal order are a stark contrast to Western values of disruptive politics, self-reliance, and independent rational thinking—China's historically philosophical, ethical, and spiritual values lead its incremental progression (Cohen, 1987; Doctoroff, 2012);
- China's ability to translate and adopt all that is foreign into its sociodemographic system, to make it exclusively Chinese, warrants examination (Bieckman, 2017; Doctoroff, 2012; Friedman, 2005); and
- China's emerging wine consumption leadership derived from its emboldened wineconsuming middle class and global tourism representatives (business travelers)—the guiding force behind *The Chinese Phenomenon* (Doctoroff, 2012; Hartley, 2017; Zhai, 2018).

China's wine industry revenue is forecast to reach \$12.8 billion and grow at an annualized rate of 5.6% over the next six years to 2023; in comparison, the U.S.A.'s revenue is projected to reach \$91.1 billion with an annualized growth rate of 0.3% (IBIS, 2017). Currently, China is one of the leading wine import markets of the future. In 2016, China was the fourth biggest import market behind Germany, the U.K., and the U.S.A. (Vinexpo, 2017). It is predicted that China will import 94.5 million cases of wines, overtaking the U.S.A. (85.8 million), to become the third biggest import market (Vinexpo, 2017). Through (1) clearly outlined success factors and (2) increased sourcing of imported bulk wine through (3) trade liberalization, China demonstrates a strong and growing international wine trade. While China's rising wine industry success may be attributed to its culture-based, socioeconomic success factors, there are numerous global influences that mold *The Chinese Phenomenon*. While not considered a direct influencer to the Chinese wine industry or luxury wine consumption, globalization has indirectly affected every stakeholder and consumer choice in the Chinese wine industry. *The Chinese Phenomenon* must be explored within a global context; assumptions must be made as a result of globalization to understand the psychological complexity behind the motivation to consume luxury wine.

Contemporary global events have created culture-based national, clan, and individual values sets that play an important role in defining luxury wine consumption in this study.

#### 2.2.2 Globalization; China Takes the Lead

The global population has increased by seven hundred million people—from 6.6 billion in 2006 to 7.3 billion in 2018—since Thomas Friedman wrote *The World is Flat: A Brief History of the Twenty-First Century* (2005). New forms of civic and digital terrorism have brutalized humanity since 9/11, and technology continues to provide outlets for "connecting" people and communities around the globe, instantly if not always interpersonally. The world continues to flatten and the implications for wine tourism—specifically wine-centered hospitality industries that target Chinese cultures—are many. There are eight contemporary globalization topics that will contend with key principles of Friedman's relevant factors: (1) overnight growth, (2) ten flattening forces, (3) from "E-" to "You-," (4) the next generation, (5) global responsibility, (6) creativity and self-learning, (7) the winds from Fusang, and (8) then and now. A brief discussion of these topics provides insight into the influence of globalization upon China. They will be followed by an evaluation of the Chinese wine industry before proceeding to the final element of the literature review: cross-cultural theory.

Flattening the world, according to Friedman (2005), means connectivity between knowledge centers in every part of the planet. This phenomenon has the potential to bring about prosperity, collaboration, and innovation, but more sinister or unforeseen consequences are collapse (of civilizations, markets, or economies), social inequalities, and exploitation. One example Friedman discusses repeatedly is outsourcing, which must provide a good wage and opportunity for advancement that would otherwise not be possible in order for such labor substitution to be socially responsible. His conviction that good outsourcing grows a company financially, as well as in employment size and reputation with consumers—rather than shrinking a workforce is an ideal to strive towards, especially in the wine production and wine tourism industries. Efficiency is a key component of these industries, but the human-centered mandate cannot be lost among profits and margins, a point that Friedman (2005) advocates given his focus on first-person encounters.

*Walls* and *Windows* are useful metaphors for much of Friedman's (2005) argument. Nearly thirty years ago, for example, the Berlin Wall fell, and yet walls still divide significant geographies in conflict; for example, the proposed wall between the United States and Mexico or the Israeli-West Bank barrier. The "in-forming" possibilities of the internet—the Microsoft Windows or Google phenomena—and personal digital devices, or "steroids" according to Friedman, have increased exponentially since the time *The World is Flat* was first published. Indeed, the book reached print as Apple was about to unveil the first iPhone, and a decade later, we can choose between iPhone X, an Android clone, or countless other providers that promise information and convenience at your fingertips. A central compelling point is communitydevelopment initiatives or partnerships. This idea is perhaps best seen in the hospitality & tourism (HTM) sector through farm-to-table dining or online delivery and meal-prep services. A brief list of the ten force includes:

- 1. Collapse of Berlin Wall. Symbolized the end of the Cold war, it permitted people from other side of the wall to join the mainstream economy.
- Netscape. Netscape and the Web expanded the audience for the Internet from its roots as a medium of communication used primarily by 'geeks and early adopters' to something that made the Internet open to everyone.
- Work Flow Software. Machines to talk to other machines without human involvement. Friedman (2005) considers these first three forces are a crude foundation of a whole new global platform for collaboration.
- 4. Uploading. Communities collaborating on and uploading online projects. Friedman considers this phenomenon "the most disruptive force of all."
- Outsourcing. Friedman posits that outsourcing has permitted companies to divide manufacturing and service activities into components—each component performed in a most cost-effective and efficient way.
- 6. Offshoring. Outsourcing, but with manufacturing.
- Supply-Chaining. Friedman (2005) makes the comparison between the modern retail supply chain [Wal-Mart] and a river as an example of a company using technology to streamline item shipping, distribution, and sales.
- 8. Insourcing. Friedman (2005) cites UPS as a perfect example for insourcing; whereas, the company's employees perform services (far beyond just shipping) for another unrelated company. For instance, UPS itself repairs Toshiba computers for Toshiba. The work is done by UPS employees at the UPS hub.

- 9. In-forming. Google is the prime example. "Never before in the history of the planet have so many people-on their own-had the ability to find so much information about so many things and about so many other people," (p. 178) posits Friedman (2005).
- "The Steroids." Personal digital devices like iPods, mobile phones, instant messaging, Voice over Internet Protocol (VoIP), and personal digital assistants.

One dynamic shift that we have witnessed is the transition from simple e-services (e-mail and other electronic outlets) to the You-phenomena, YouTube, and other, user-centered, uploading opportunities (blogging/v-logging among others). Friedman (2005) argued that these communal and individual online projects are the most disruptive forces of all for the flattening of the world, because they shattered traditional ceilings, broke through walls and floors in unimaginable ways. Yet, censorship remains a powerful tool for limiting access or stifling growth under certain regimes.

On another level, the blurring or intertwining of identities—in our industry of team members, managers, consumers, stakeholders, and the generational divide (Boomers to Millennials and beyond)—can be seen as very real factors to contend with or hurdles to overcome. This blurring of identities is a topic often demonstrated by the leading global wine consuming cultures of China, India, and Brazil. As the many identities of the global wine consumer (enthusiast, drinker, buyer, marketer) become intertwined with each other, differences between leading cultural wine consumers also become blurred. For instance, wine is often mixed with cola- and citrus-flavored soft drinks in both China and Brazil. Whereas the cultural reasons to mix and consume are different and exclusive between wine consumers in both countries, the cultural motivation loses meaning from a global perspective. These differences across leading cultures are still marketed for their niche value, but simple international e-wine services and tourism, for instance, place more effort on marketing wine to global demand.

Friedman (2005) highlights the importance of this topic through commoditization in a wide range of industries where consumers are overwhelmed with options and all considered to be the same type of consumer. Therefore, each wine tourism cluster is driven to be more innovative and creative, or risk falling between the cracks. CEO and cofounder of Aramex, Fadi Ghandour, created a home-grown package delivery service. His internet-based international network cut costs and was designed to compete with the largest in the business (like Alibaba and Amazon) and come out ahead. Friedman explores, through other business models, that globalization forces

large companies to act small, such as Starbucks. The Seattle-based coffee company uses soy milk as a tool to fulfill a need in their niche market segment. He emphasizes that companies must be willing to collaborate and focus on niche markets—completing on their own that which must be done to stay in front of their customers—and outsource the rest. The top companies use outsourcing as a method of growth, not to decrease their workforce. Outsourcing permits them to offer better and more services more efficiently.

A relevant concept for anyone pursuing a degree in Hospitality and Tourism Management (HTM) is Friedman's mandate to become "untouchable," that is, to demonstrate proficiency and preparation in the most varied and marketable skill-sets; to have the competitive edge against all established and emerging societies. Proficiencies that cannot be outsourced or digitized make an individual untouchable. In an age-old industry like wine and fermented beverages, experimentation and versatility may lead to increased profits and prestige, so long as brands appoint explainers and "leveragers" to educate and entice the public markets.

Another forward-thinking theme throughout *The World is Flat* is sustainability, energy efficiency, and environmental responsibility. These three components define HTM concerns today. Friedman's (2005) reference to venture capitalist Steve Jurvetson's ideas about clean tech, bio-derived solutions to energy and environment correlate to certain sectors of oenology but also remain hotly contested among more traditional markets (here we may, in fact, think of France and China along similar lines in relation to wine, despite their vastly different histories, if we consider their respective openness [or resistance] to viticultural experimentation or bio-diversity and biodynamicism). Merging disparate markets does require skilled "personalizers" and "localizers," individuals who intimately relate to others and whose knowledge of place is the most highly desirable asset, respectively.

The "Tubas and Test Tubes" model of preparing children and young adults to be acrossthe-board competitive is as compelling a notion as it is daunting. As the field of technology gears up from its multiple-decade "warm up," as Friedman (2005) characterizes it, how can we instill in students the need to nurture curiosity and passion when bottom lines, margins, competition, and reviews can so quickly cause a business or commodity to fail? Moreover, the politicallyloaded "American Dream" that champions curiosity and passion does not or may not necessarily resonate with cultures founded on Euro-American (Western) values. China's Daoist, Maoist, and especially Confucian values of harmony, clan, and a universal order that are a stark contrast to Western values—China's historically philosophical and spiritual values lead its incremental progression, but Friedman could have attended to China's ability to assimilate and adopt all that is foreign, backed by inspirational capitalism, into its sociodemographic system, to make it exclusively Chinese. This Chinese (Eastern) versus Euro-American (Western) point is key and further discussed in this chapter.

"Fusang" is a Chinese term that refers to an eastern shore, which cultural theorists, philosophers, poets, and artists have at times associated with Mexico. Friedman's (2005) chapter outlining competition at a global level was most compelling in thinking about China and Mexico in the modern age. The example of statuettes of *The Virgin of Guadalupe*—an iconic and miraculous Mexican manifestation of the Virgin Mary as the Woman of the Apocalypse—being manufactured in China for sale in Mexico (to locals and tourists) represents not only competition between developing or emerging countries/economies but also mutual exploitation. Mexican businesses outsource to China to keep costs low and Chinese enterprises benefit from Mexico's Catholic tourist market (of locals and foreigners). Just north of Mexico, in the United States, businesses have saved well over \$600 billion by outsourcing to, or purchasing from, China. This staggering figure hints at the ethics that hide (surprisingly) just beneath the surface; China uses capitalism as a guise to embrace important cultural factors of other cultures.

In contrast to this triangulated trade scenario is the example of Ireland attracting Chinese graduate students with the goal of engendering diversity and positive competition/collaboration among top minds from culturally diverse backgrounds. This example demonstrates an openness to foreign influence on the part of the Irish universities, businesses, and leaders. Friedman (2005) would characterize the Irish, in this aspect, as demonstrating an outward culture. Inwardness, on the other hand, is defined by national solidarity. Here again Friedman's point about defining and negotiating identities seems relevant to HTM, especially if we consider the blended approach to flattening the world known as globalization (finding the global in the local or adapting the global at the local level—one thinks immediately of finding mozzarella and prosciutto sandwiches on McDonald's menus in Italy or spam options in Hawai'i) (Friedman, 2005).

Forward-thinking again throughout *The World is Flat* is Friedman's assessment of the American political agenda that instills a degree of apprehension about China's potential to surpass U.S.A. (Western) innovation, production, and economic growth. China's capability to boost domestic consumption, decidedly increase per capita wine consumption, streamline its

wine industry revenue, and increase industry success factors and international trade, position it as an emerging leader in consumption that will eventually steal the wine spotlight from the West. This anxious rhetorical device was present in the recent presidential election, and the (adverse) effects of these ideas on industries across the U.S.A. may likely become fields of study for political scientists, sociologists, historians, and others, including HTM. Friedman's (2005) admonition that American leaders and entrepreneurs (and parents) must be self-reflective about who their models / idols are and where they ascribe value in a global continuum is valid, because his anecdote about Americans idolizing The Rolling Stones or Britney Spears while other countries lionize Bill Gates can be found to be chillingly poignant.

Does globalization preserve or destroy culture? Friedman argues that it preserves, because it equalizes the degree to which every individual has a voice for contributing a unique perspective (the commoditization of the individual). But surely this ideal ignores or side-steps cultures of censorship or social inequality. Friedman alludes to this point by considering terrorism as a destructive, inhumane force. The optimism with which he sustains his narrative does find balance at the end of the book, where Friedman suggests (idealistically) that those in free societies should be thought leaders, activists, and connectors.

The adages that imagination is the product of necessity, and that necessity is the mother of invention resonate despite the triteness of these ideas. Imagination requires significant preparation and a competitive edge, and Friedman believes that these attributes will lead to an optimistic future. The paradox for China, wine, and tourism remains the promise of connectivity. The internet and digital services/platforms can connect all the world, in terms of geo-spatial potentiality, but still some communities, regimes, or entire countries remain unconnected or not fully connected due to censorship, cultural resistance to Americanization/Westernization, and so forth. This conversational approach has provided insight into the major influences of globalization upon China. Now, a deep look into the important factors behind China's wine consumption and production industry is taken before defining the *New Chinese Consumer*.

# 2.2.3 China's Wine Industry: Important Factors

China's culturally-complex and prosperous contemporary wine industry has been welldocumented. China's early recordings of wine production and consumption achieved initial precedence in The Tang Dynasty (618-907 C.E.), noted by poet Li Bai in *Dui Jiu*; the reign of Kublai Khan (reigned 1260-1294) until the late Yuan Dynasty (1271-1368), noted by the *Collection of Important Matters of Agriculture and Sericulture*; and again during the Ming Dynasty (1368-1644), noted by the *Whole Book on Agricultural Activities* (Li, 2013; Liu, 2011). No one can debate linking wine making, China, and the Bell Beaker—praising China as the creators of wine (Fokkens & Nicolis, 2012; Liu, 2011).

Conversely, other researchers attribute the lack of refinement, quality, technical skills and equipment, and research in contemporary Chinese wine making to the phrase, "staying within the wall" (Hughes, 2013). That is, "the wall" has limited the free exchange of wine making research across borders, thus limiting the capacity to synchronously import and export wine making knowledge. Internal factors, such as communism, government, and war, are three of the most influential elements affecting the modern Chinese wine industry (Hughes, 2013; Li, 2013; Liu, 2011; Maguire, Lim, Polsa, & Zheng, 2015). Therefore, the strongest factors that impact the Chinese wine industry are internal—those born within "the wall." Important factors that affect the Chinese luxury wine industry are closely related to foreign (luxury) and domestic (including regulations, standards, promotions, and technology and research) markets.

# 2.2.3.1 Foreign, Luxury Wine Market

Due to China's World Trade Organization commitments, the average wine import tariff declined from 65% in 2001 to 45% in 2002, 24% in 2004, and 14% after 2005 (IBIS, 2017). After 2004, imported wine was finally accessible to the middle-class Chinese people; albeit, tariffs and taxes made every day consumption of luxury wine prohibitive.

China's central government encouraged foreign and domestic enterprises to invest in the Chinese wine market and provided favorable tax policies for foreign enterprises; this brought advanced technologies, skilled employees, and equipment to the developing industry (Business Market Research Collection [BMRC], 2017; IBIS, 2017). In 2006, the government created the Measures for Administration of Wine Consumption Tax, which reduced the excise tax on imported wines and improved their competitive advantage in the market (IBIS, 2017). Imports tariffs also decreased after China's accession to the World Trade Organization (IBIS, 2017). When measured against global luxury wine markets, China falls short in domestic production; however, China is a leader in luxury wine consumption and relies on foreign imports to meet demand. Consequently, China's current luxury wine market is solely defined by imports.

In 2007, major wine manufacturers began to differentiate their products by enhancing brand values through interaction; for instance, wine leisure, grape planting, grape crushing, wine making, and wine commerce. Experience-based wine consumption strengthens brand awareness and brand loyalty (also called brand love) (Cuomo, Tortora, Festa, Giordano, & Metallo, 2016; Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015). Subsequently, Chinese wine imports increased 15% in volume and 8% in value between 2016 and 2017; in real numbers approximately 407 million liters, worth about \$1.5 billion (China Wines Information Website [CWIW], 2017; China Wine and Spirit Awards [CWSA], 2017). Bottled wine imports (91% of the total) rose by 14% in volume (to 303 million bottles) while value grew six percent to \$1.4 billion over the same period (CWIW, 2017; CWSA, 2017). The increase in luxury wine consumption from 2007 to the present led to the natural development of a significant price difference between imported and domestic wine, forming two different market segments: foreign (luxury) and domestic (domestic, four-tier grade system) (IBIS, 2017).

The Chinese luxury wine market (separate from the domestic, four-tier grade system) is described by imports at and above \$100 retail cost per bottle, and consists of imports predominantly from France, Australia, and the U.S.A. (Cohen, Corsi, Lockshin, Bruwer, & Lee, 2017; Lockshin, Corsi, Cohen, Lee, & Williamson, 2017; Sjostrom, Corsi, & Lockshin, 2014, 2016). Examples include France's *grand cru classés* Bordelaise Margaux and Lafite, Australia's Penfold Grange and Henschke, and the U.S.A.'s Screaming Eagle and Opus One. Chinese consumers are generally aware that wines from France, Italy, and other European countries are of better quality than domestic wines; however, the lack of investment in marketing channels has impelled consumers to consume domestic brands over foreign brands. Moreover, 2012 entry barriers for imported wine established hard thresholds for scale and raw material guarantees; for example, maximum alcohol by volume, phenolic content by volume, and sulfites by volume (IBIS, 2017).

Luxury wine consumers earn a higher than average income level and, as an example, ascribe more importance to price rather than taste and quality; in addition, within the same price level, brand plays a more important role (Cohen, Corsi, Lockshin, Bruwer, & Lee, 2017; IBIS, 2017; Mintel, 2017). Consequently, a plethora of media outlets advocated wine culture, and foreign entities held promotional wine-tasting events in populated wealthy, Chinese culture-based cities as Beijing, Shanghai, Shenzhen, and Guangzhou. This popularization has assisted to

expand consumer knowledge of wine, hence stimulating wine consumption. Furthermore, the government has maneuvered alcohol consumption trends over the past seven years, discouraging the consumption of high alcohol drinks (such as baijiu, rice spirit from 40% to 50% alcohol by volume) and encouraging the consumption of healthier drinks with lower alcohol content such as wine (from five to 15% alcohol by volume) (IBIS, 2017). The government, together with manufacturers and the media, have promoted a wine-based culture by increasing wine awareness among Chinese consumers and stimulating consumption growth across the country (IBIS, 2017). These are just a few of the country-wide indicators that demonstrate how China's wine industry is assimilating international preferences and manipulating alcoholic beverages that are offered across China toward global preferences.

Due to small luxury wine supply, large domestic bulk wine supply, government restrictions, and high tariffs, China's wine exports are low, accounting for an estimated 5.3% of industry revenue in 2016 (BMRC, 2017). Chinese wine has few competitive advantages, and domestic production technologies are underdeveloped compared to foreign production. Wine output in China is also very small compared to other large production bases, not exclusively wine-based. Chinese wine quality and maturity are also relatively lower (IBIS, 2017).

#### 2.2.3.2 Domestic Wine Market

As brand plays an important role in foreign luxury wine purchasing decisions, brand image is crucial for domestic market competition. Domestic Chinese wine consumers prefer well-known brands, such as Changyu, Dynasty, and Great Wall (IBIS, 2017; Mintel, 2017). In 2016, revenue of the industry's five major brand-based entities accounted for 15% of total industry revenue, indicating a low level of industry concentration (IBIS, 2017). These five companies include:

- 1. Yantai Changyu Pioneer Wine Co., Ltd. (Changyu brand);
- 2. Wei Long Grape Wine Co., Ltd. (Grand Dragon brand);
- 3. China International Trust Investment Corporation (CITIC) Group Co., Ltd. (Niya, Xiyu and Xintian brands);
- National Cereals, Oils, and Foodstuffs Corporation (COFCO) Group Co., Ltd. (Great Wall brand); and
- 5. Dynasty Fine Wines Group Co., Ltd. (Dynasty brand)

There are four grades, or levels of Chinese wine, measured by two elements: market brand impact and quality (IBIS, 2017). The four grades from highest (global equivalency of upscale table wine) to lowest (global equivalency of "everyday," "lake," or "jug" wine) are master, collection, choice, and general choice (IBIS, 2017). There are four collections (groups) of wine producers with corresponding, well-recognized brands. The first group includes the top brands Changyu, Grand Dragon, CITIC, Great Wall, and Dynasty. They produce master grade wine, which caters to the high-end domestic market. The brand images of these firms are wellrecognized as they invest significantly in advertising. Their profitability is also much higher than that of choice and general choice grade companies. For instance, the profit rate of Changyu was more than 30% of revenue in 2014, while the average domestic wine industry producer profit rate was about 10% (IBIS, 2017). The second group includes less known brands such as Weilong, Weitai, Baiyanghe, Yunnanhong, Tonghua, Feilong, Yuma, Huadong, and Renhe (IBIS, 2017). These brands' groups supply to the mid-range and everyday quality wine markets. Although most of these firms sell products in many regions, the average annual revenue of most enterprises in this group is below \$14 million (IBIS, 2017).

The third group of brands include Beijing Shunxing, Beijing Fengshou, Yunnan Shangeli-la, and Beijing Longhui (IBIS, 2017). Most of these enterprises sell wines in local markets and concentrate on everyday quality products. The final group of producers are smaller and include Beijing Hongye, Changli Diwang, Lankao Luyi and Gansu Qilian (IBIS, 2017). They also sell products in local markets at lower prices and commonly earn revenue under \$3 million. The number of small firms is expected to decline due to government-issued regulations increasing entry barriers and standardizing [quality levels in] the industry (IBIS, 2017).

Implemented by the Ministry of Commerce of the People's Republic of China in 2006, the Measures for Administration of Alcohol Circulation (MAAC) promotes the systematic development of the alcohol market and protects the legal interests and rights of alcohol producers, managers, and consumers (IBIS, 2017). Although MAAC's intent is to track domestic wine data from production through distribution to prevent the appearance of counterfeit products, it is a challenge to use this data to control the illegal packaging—and blending and repackaging—of fake global luxury wine in China (Ambler, 2017). Approximately more than 30,000 bottles of fake imported wine continue to be sold per day in China (Ambler, 2017; BMRC, 2017). For instance, this notable counterfeit sale escaped MAAC's reach: in 1985 a single bottle of wine—named the Thomas Jefferson bottle—was sold for a record-breaking \$157,000 at Christie's in London, but was later proven to be a fake from a China-based company (Ambler, 2017). MAAC specifies that wines produced in China must label the year of grape harvest, that the grape juice content should be more than 80% of the varietal, and that wines must meet the Hygienic Standard of Fermented Wine (IBIS, 2017). Special wines must also meet the China Wine National Standards, including carbonated wines, liqueur wines, noble rot wines, ice wines, low alcohol wines, flavored non-alcohol wines and *vitis amurensis* (native Asian continent varietal) wines (IBIS, 2017).

China also implemented a set of standards known as the Wine Quality Grade Standards in 2006 as a categorization of domestic wine. Most Chinese wine consumers, with the exception of business travelers, lack a clear understanding of wine; so, the Wine Quality Grade Standards (master, collection, choice, and general choice) have become important purchasing criteria. (IBIS, 2017). Looking forward, as China's central government begins to formally regulate and standardize—for the first time in its history—foreign producers and the domestic Chinese groups of producers have begun to implement strategic promotions.

Foreign producers in China have found it difficult to compete in the Chinese wine market as limited capital has been invested in building market channels (IBIS, 2017). The market channels in China are complex, with various outlays required to be paid. Chinese winemakers pay introduction fees, corkage fees, and sales promotion fees to restaurants, supermarkets, shopping malls and nightclubs to ensure the visibility and availability of their products (BMRC, 2017).

Some domestic producers set up subsidiaries across China and establish specialty stores in large cities (IBIS, 2017). Large producers also invest significant amounts in television advertising to bolster their brand awareness and increase sales (IBIS, 2017). This strategy has been successful for several large producers. Still other enterprises have wine châteaux for consumers that offer many activities such as grape planting, wine making, wine leisure, and wine commerce. However, many foreign firms face difficulty in the Chinese market as they do not understand the specifics of these fees or are not willing to pay them (IBIS, 2017). As a result, most foreign enterprises sell wine via agents with the promotional investment undertaken by these agents. Subsequently, most agents will sell various brands and do not specialize in the promotion of a single brand.

Although China's wine industry technology has developed rapidly in recent years, the sophistication of its technology has far to go when compared with the major wine production bases of France, Italy, Spain, and the U.S.A. (IBIS, 2017). The IBISWorld Industry Report (2017) stated about 52 cents, for every USD spent on labor, are invested in capital in China's wine production industry. Establishments within this industry make significant investments in wine production equipment and technologies There are three main methods for developing wine technology in China: the import of advanced technology and equipment; the establishment of joint ventures; and the development of wine laboratories and research institutes (BMRC, 2017; IBIS, 2017). With the industry's growth, more enterprises realize the importance of research institutes; alliances are being made to develop new technologies and products (BMRC, 2017). In 2002, Great Wall and China Agricultural University set up the China Agricultural University Great Wall Wine Research Center (IBIS, 2017). Thereafter in 2004, Beijing Dragon Seal Wines and China Agricultural University set up the China Agricultural University and Dragon Seal Wine Laboratory (IBIS, 2017). Companies expect to develop their technology with the help of universities. Consequently, they can then introduce and train professionals and technical personnel who can deliver wine education directly to the Chinese consumer thus influencing their wine preferences.

#### 2.2.4 The New Chinese Consumer

The new, *old* Chinese people see luxury western products as status brands meant for public consumption; private, in-home consumption is consistently utilitarian, never luxurious (Jacques, 2009). Barbie (a children's fashion toy), for instance, failed entrance into the Chinese market (by means of the Shanghai fashion district) due to her "obvious," scrubbed-clean California image (Doctoroff, 2012). Barbie's attempt to project a colorful, modern, and international lifestyle fell short of her bane—Hello Kitty. Hello Kitty is a cartoon character produced by the Japanese company Sanrio and considered an icon across Asia, especially in China. The porcelain-hue, round-face, and invisible mouth Hello Kitty engrained in Asian culture is a contrast to Barbie's tanned skin, oval face, and painted lips. Hello Kitty is purely understated cuteness—not outwardly obvious—the essence of Chinese (Jackson, 2009). While the scrubbed-clean, symbolic essence of other Western products, like Starbucks and Haagen-Dazs, should have failed, marketers used the face value of the products to promote a distinctly

Chinese value: Projection (Pesme, 2017). China drinks tea, not coffee (Brooks, Buzby, & Regmi, 2009; Grigg, 2002). Chinese people are not willing to spend \$7 on a pint of exquisite ice cream to eat at home while watching an illegal DVD from a very inexpensive television (Doctoroff, 2012). That is, both Starbucks and Haagen-Dazs are two Western products that initially stumbled to meet the face value their products were assumed to provide in the Chinese market. Brand strategists could not rely on the Western passion for a quality cup of coffee or ice cream with organic ingredients. The strategists flaunted the companies' products' projection of luxury, status, and eliteness to spark sales in China (Bieckman, 2017). If one is seen drinking overpriced coffee and eating expensive ice-cream in public (not at home) then projection, ambition, and face are earned (Pesme, 2017). In turn, public consumption of luxury products builds social advancement; they are tools to gain status (Bieckman, 2017). Projection is at odds with protection, yet the middle class seeks a harmony between the two. Projection is an in-themoment action that increases an individual's status; oppositely, protection is an action that supports long-term success of the individual in order to support communal unity of the nation and clan. Doctoroff (2012) describes this as pragmatic advancement: positioning a product as a means to the end. Western products must unify internal conflict between Confucian ideals and the desire to be individually recognized.

The new, middle class Chinese populace emerged following Deng Xiaoping's 1992 economic reforms (Zhao, 1998). Zhao (1998) posited there were 125 million in this category in China by 1998, with more than 700 million expected by 2020. The middle-class balances three variables: (1) basic needs of survival, (2) physical safety, and (3) need to satisfy social status requirements (Gambrel & Cianci, 2003; Jacques, 2009). Above all, the middle class seeks to create sustainability, reducing the chances of falling off the middle-class pedestal (Farrell, Gersch, & Stephenson, 2006). When the middle class saves cash for long-term goals, it supports the value of protection and supplements the pervasive lack of security and welfare for the individual Chinese citizen. Purchases, such as diamonds, must reflect long-term commitment as symbolized in marriage (Jacques, 2009). The evolution of the middle class begins with complementing the basic needs of survival noted above with substance, luxury, and income that remains understated and in harmony with society (Doctoroff, 2012). Jacques (2017) states that the individual Chinese citizen desires to be acknowledged of her/his potential, not admired for an achievement. All aspiring [middle class] professionals—in China, career and class are inextricably linked—are torn between impulses to boldly project status while remaining within social Maoist confines (Doctoroff, 2012). China's middle class is the demographic of *The Chinese Phenomenon* that leads the way in global wine consumption.

Middle class buying motivations include protection at home and bold status projection in the public arena; that is, protection still outplays projection of status (Bieckman, 2017; Doctoroff, 2012). When considering strategic imperatives, low- versus high-tier markets can be explained by, "bigger is better" and "value beyond price" (Bouzdine-Chameeva, Hanf, & Zhang, 2016). In the home, value and longevity are key, desirable characteristics in products; whereas, in public, luxury and recognition are a priority (Bieckman, 2017; Doctoroff, 2012). Although the middle class may favor luxury, it is short on cash. Because premium products are largely undifferentiated and tarnished by association with the wrong type of customer, the middle class can neither be caught with a fake but must sacrifice price in order to achieve face (Ambler, 2017). The capacity to increase luxury knowledge, is also important, and can be explained through luxury design.

Successful design addresses the need to show off in an understated manner (Doctoroff, 2012); for example, Mont Blanc's subtly obvious white star and Cartier's classic gold-framed watch face. As the middle class' sophistication increases, branding must become more discreet (Doctoroff, 2012; Jacques, 2012). This is displayed in Louis Vuitton's premium bags *without* the LV logo—they are custom made items for the most exclusive customers. The term of luxury is not solely limited to Chinese fashion and cars.

Cars are not a necessity. In a land of single children, there are no "soccer moms" public transit dominates. A car costs approximately 120% of annual income as compared to 30-40 percent in the U.S.A. Cars express status as king; an unquenchable thirst for status and display of the conflict between upward ambition and hierarchal regimentation (Doctoroff, 2012).

In China, self-actualization is a dangerous game: the individual has never been, and will never be, the basic productive unit of society (Bieckman, 2017; Doctoroff, 2012). Identities are inextricably linked to the clan and nation, both requiring equal time and commitment (Hartley, 2017). Childhood has traditionally been defined by obedience and acquiescence, proving ultra-conformism as the only viable path to adolescence. In contrast, Western children have been freed from the shackles of Victorian regimentation and empowered with self-determination, individualism, and encouraged to live freely and joyfully (Doctoroff, 2012; Hartley, 2017).

Doctoroff (2012) discusses that China's young digital lives can be described in three words: acceptance, acknowledgement, and transcendence. China's young grew up in sheltered, protective households; however, their egos are huge. Given values of saving face and understatement, blatant projection is frowned upon (Doctoroff, 2012; Moyo, 2013). Finally, young Chinese people are fundamentally optimistic about the future, but need an occasional break.

The concept of the self, or individual, fails to exist in China (Doctoroff, 2012; Jacques, 2009; Wan, 2014). Doctoroff (2012) explains that it is superseded by family and nation. Family is first; it is difficult to overstate the primacy of the clan, driven by a profound sense of mutual obligation, obedience to hierarchal order, and protective shell regarding contemporary economic realities (Doctoroff, 2012; Farrell, Gersch, & Stephenson, 2006; Moyo, 2013).

Where family is first, country comes second—a double-edged sword. When the national dignity is compromised, when feelings of the Chinese people are hurt, chaos ensues (Moyo, 2013). Moyo (2013) continues to explain that in times of national crisis, paranoia rises to the surface and conflict resolution becomes almost impossible; there is an ambivalence toward the government. China's conception of itself as a civilization rather than a nation-state explains why its inherent nationalism does not automatically translate into support for the Chinese Communist Party (Cohen, 1987; Jacques, 2009; Zhao, 1998). Simultaneous constructs include middle-class insecurity due to the lack of social welfare support, sublime order of the communist party, growing ambivalence between middle-class consumers and the government's inability to provide for them, and an eye toward progress by continuing with the status quo instead of acting upon their desire for institutional reform (Ambler, 2017; Doctoroff, 2012; Jacques, 2009).

There is a critical factor brought forth by the internet and access to immediate information. The internet fuels both emotions and cash drives, inspiring millions to give to far away causes as the Sichuan earthquake and China's tainted milk, both which occurred in 2008. Although the flow of information from the government was fast and factual, the government uses social media to limit tragic events from 36 to 48 hours of controlled outcry, rallying, and mobilization. In these instances, the New Chinese Consumer is groomed to be "show-ready," to make a swift, precise, and heart-felt response to tragedy within a window of time determined by the government. Thereafter, the Chinese people are expected to return to a state of ambivalence. These characteristics of Chinese consumers and Chinese society greatly influence the culture-based factors that lead to the current wine preferences of the business traveler who identifies identified as culturally-Chinese. However, to continue to understand contemporary thought about Chinese consumers and their behavior, the discussion continues to explore the concept of *East versus West*.

# 2.2.5 Chinese (Eastern) versus Euro-American (Western) perspectives

Jacques (2012) posits that Westerners have found it very difficult to come to terms with the rise of China, to understand its roots, its capacity for endurance. Jacques (2012) makes this claim because there has been an insistence on trying to understand China through a Western prism—which is not appropriate. A common Western colloquialism is to think in the perspective of "West versus East" or view the East through a Western lens. It is a common assumption in the West that as nations modernize, they also Westernize. It is an assumption that modernity is a product simply of markets and technology—this is an illusion (Bieckman, 2017; Jacques, 2012). Bieckman (2017) explains modernity is equally shaped by history and culture. China is the only developing country in the modern era that is also forecasted to earn the largest economy. China continues to experience 10% annual growth; when measured against a 1.38 billion population, China is on a path to be the largest economy in 2020 (Jacques, 2009). Globalization and world affairs highlight the increasingly important effect of China's cultural success factors on Chinese people wine consumer behavior.

These effects can be further explained by Wine Institute (2017) statistics. An increase in per capita consumption from 2008 through 2011 can be compared between the three-up-and-coming wine consuming nations: China (58.7%), India (41.4%), and Brazil (23.1%). Although India's 1.32 billion and Brazil's 208 million 2017 populations mark them as up-and-coming wine industry leaders, China's 1.38 billion population, when measured against production, country consumption, and per capita consumption, implies valid wine industry leadership (WineInstitute, 2017). China's enormous growth in consumption is apparent, but its wine industry leadership can be further supported by country-based revenue projections and success factors.

Cohen (1987) argues that the West thinks of itself as very cosmopolitan and the rest of the world as provincial, but the exact opposite is true. Actually, the West is provincial because it does not know about the rest of the world (Cohen, 1987). Because of military strength, the

U.S.A. has never really felt the need to get to know the rest of the world; whereas, other cultures like those from China are in fact much more cosmopolitan because they have been forced by Western hegemony to make sense of Western thinking and attitudes and adapt to it so they have had to explore their own cultures in a different way (Cohen, 1987). Frans Bieckman, like Cohen, discusses the "false assumption of the West." However, how is one to understand the behavior of the Chinese consumer if not by Western terms? Jacques (2009) offers three aspirational solutions for understanding this complex perspective.

First, China is not really a nation-state. China has been a nation-state for a mere few hundred years; yet, it was instead founded upon a 2000 year old civilization-state socioeconomic foundation, or conglomeration of self-governing mini-nations linked through economic interdependence and cultures (Jacques, 2012). China is not only geographically immense, but it is also extremely pluralistic and diverse, and in many forms very decentralized. Opposite to the Western nation-state as the infrastructure of political identity, the most decisive political value for the Chinese people is the maintenance of Chinese civilization and unity(Jacques, 2012). Second, there is a dominant perspective based on ethnicity across China that reveals China's cultural identity: Han. In China, 92% of inhabitants consider themselves a Han person, misunderstood as Han-Chinese; there is a strong exclusionary perception of superiority to that identity (Jacques, 2012). Finally, the relationship between society and state in China is very divergent from the Western perspective. The state is the protector or guardian of civilization in China; it has had no genuine rivals in history, unlike in the West (Jacques, 2012). The Chinese people understand the state not as an invader, but as the leader of the family. Jacques (2012) discusses the fact that China is not state or market, but both. The market in China has always been very developed—excluding the Mao period (1949-1976)—but state is also very capable, and able to undertake for example, huge infrastructural tasks (Jacques, 2012).

Jacques (2012) postulates that the world will soon be driven by former developing countries. That is, the world will become progressively unfamiliar to the West, because it will be defined by histories, cultures, and experiences with which we are unfamiliar(Jacques, 2012). Jacques (2012) posits that the route forward to the global future is to really welcome and understand these other civilizations, which have long been discounted by the West. The West has never really attempted to understand other cultures. Those cultures that have been less formidable during the recent 200 years of Western dominance have been compelled to understand Western culture. Understanding the psychological motivators behind the luxury wine consumption may be complemented with the discussion of the clash, adoption, and assimilation of cultural values in cross-cultural theory and literature.

# **2.3 Cross-Cultural Theory**

Chinese people express key culturally-defined characteristics as a reflection of the relationship between self and group. This relationship can be defined as a cosmological philosophy, a worldview that finds harmony between the ability to express one's individuality within the social rules of society, and a universal order that relies on family as the foundation of society. Within the Chinese culture lies the value of face, or the need to increase social status as a means to find harmony between the self and society (Doctoroff, 2012). Face is earned [and lost] in intangible units through social intergroup interaction. Thus, there was a need to understand both the business travelers' self-perception and self-expression within domestic and global cultures that motivate luxury wine consumption. Thus, this study used two theories: self-identity (Horowitz, 2012) and social-identity (Tajfel & Turner, 1979).

# **2.3.1 Theoretical Framework**

Self-identity posits that the subject is at odds with both self and society. That is, Chinese people's self-identity parallels the subject's desire for societal recognition measured against the conservative presentation of individual accomplishments and larger-than-life achievements within the social confines of society (Doctoroff, 2012; Jacques, 2012). Simultaneously, Chinese self-identity must be expressed within the social limits of Confucian society. The subject battles self-expression within the group-based confines of nationalistic society—nation before individual—where eternal strength can only be acquired through unity, control, and sameness (Doctoroff, 2012; Jacques, 2012). Tajfel and Turner's (1979) social identity theory explains that part of a person's concept of self comes from the groups to which that person belongs; an individual has multiple identities and selves associated with their affiliated groups—more than just a personal selfhood.. Chinese social-identity is an individual's social connection and interdependency to and with all members of Chinese society. Self-identity becomes apparent within the group after the subject evaluates differences and similarities between self and society (Tajfel & Turner, 1979). Accordingly, a subject may act differently within the varying social

climates to which the subject belongs. To a similar degree, the Developmental Model of Intercultural Sensitivity (DMIS) also explains how the subject experiences and engages cultural differences between self and society (Bennett, 1986).

The DMIS is grounded theory and relies on concepts from constructivist psychology and communication theory to narrate the increasing sensitivity to cultural difference. Chinese millennials, for instance, want to be seen drinking coffee in Starbucks, eating Häagen-Dazs brand ice cream, wearing Cartier, and sipping Lafite at a business dinner. They are aware of a marked difference between their personal social goals of projection and ambition and the goals of their society, protection and regimentation. This behavior is closely linked to self-categorization theory — the perception of group (self-included) — and the consequences of being perceived in group terms (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

This study's overarching, grounding theory that guided the instrument development relied on two key theories as guides toward assessing the culture-based motivators to consume luxury wine—central to understanding the behavior, attitude, perceptions, and cultural interaction—by business travelers that identify as culturally-Chinese: self-identity (Horowitz, 2012) and social-identity (Tajfel & Turner, 1979). The underpinning theory is further supported by interdisciplinary and field-specific literature. The sequential collection and reduction of pertinent literature from the following four major groups of literature were used to determine the culture-based items for the instrument:

- 1. Interdisciplinary scale development,
- 2. Interdisciplinary inventory tests,
- Hospitality and Tourism Management (HTM)-specific culture-based scale development, and
- 4. HTM-specific culture-based item development.

# **2.3.2 Interdisciplinary Scale Development**

There are diverse strategies used in scale development, often described using varying titles for similar approaches. Brown (1983) established three primary categories: logical, empirical, and homogeneous. Worthington (2006) classified a slightly different set of categories: logical (also called rational), theoretical, and empirical. The latter empirical category requires criterion group and Factor Analysis methods. The logical approach simply uses the scale

developer's judgments to develop or identify items that are distinctly related to the characteristic being measured. On the other hand, the theoretical approach uses psychological theory to diagnose the content of the scale items. Both the rational and theoretical approaches are suitable methods in scale development; yet the more stringent approach uses statistical analyses of item responses as the foundation for item selection founded on predictive utility for a criterion group (such as *face value*) or homogenous item groupings. Seven manuscripts served as guides for the instrument's development.

Achenbach et al. (2008) refined sampling procedure were used in this study for developing a scale from populations' samples from many societies in order to provide a basis for multicultural norms. Step-by-step procedures in designing this instrument with evidence of reliability and validity were adopted for this study from Bouckenooghe, Devos, and van den Broeck's (2009) development of a new instrument. Not only were the steps in determining the initial constructs and generating scalescale items utilized in this study from Cheung and colleague's (1996) development of a Chinese personality assessment inventory, but its procedures for verifying scales statistically, standardizing the scales, and attention paid to the identification of culturally-relevant items from a non-Western culture closely served as guidelines in this study's instrument development. Hammer's (2003) validity testing of his intercultural development inventory provided insight into cross-cultural validity. The cultural belief system explored by Lieber, Fung, and Leung's (2006) culture-appropriate assessment provided a key dimension development guide. Similarly, Puppatz, Burmeister, and Deller's (2017) assessment of culture in cross-cultural setting offered a close look into the psychometric quality and cultural equivalence followed in this study. Finally, cultural-sensitivity was observed in this study's instrument using Wong, Fu, Guo, Lam, and Snowden's (2012) procedures to scale screening using an item response approach.

# **2.3.3 Interdisciplinary Inventory Tests**

Inventory tests can identify goals of intervention, allowing practitioners to design effective training programs and to assess worth, which are important for organizations and individuals (Matsumoto & Hwang, 2013). Eight inventory tests of greatest cultural importance to this study were evaluated:

• Cross-Cultural Adaptability Inventory (CCAI),

- Cross-Cultural Sensitivity Scale (CCSS),
- Cultural intelligence (CQ),
- Intercultural Behavior Assessment (IBA) and Behavior Assessment Scale for Intercultural Communication (BASIC),
- Intercultural Adjustment Potential Scale (ICAPS),
- Intercultural Sensitivity Inventory (ICSI),
- Intercultural Development Inventory (IDI), and
- Multiple Personality Inventory (MPQ)

Following the review, three studies provided models of development from which this study's instrument was based: 1) The Intercultural Adjustment Potential Scale, 2) Intercultural Sensitivity Scale, and 3) Multiple Personality Inventory. These studies were found to be somewhat comparable in nature and purpose and revealed factors and items that relate cross-culturally.

The Intercultural Adjustment Potential Scale (ICAPS) was created by Matsumoto et al. (2001) as a means to assess the potential for intercultural adjustment as a function of the psychological skills that individuals possess. They identified eight factors to assess: emotion regulation, critical thinking, openness, flexibility, interpersonal security, emotional commitment to traditional ways of thinking, tolerance for ambiguity, and empathy. Following substantial reliability evaluation, specifically from an initial EFA of the 55-item ICAPS involving 1,751 respondents, the four factors were labeled Emotion Regulation, Openness, Flexibility, and Critical Thinking. Several ICAPS tests received multi-language reliability confirmation with documented Spanish and Japanese versions of the test. Thus, the intercultural adjustment scale provided factor value to this current study in addition to language and contextual value. The specific ICAPS tests contributed procedural guidelines to this study's translations from English to Huayu (Chinese dialect).

Grounded on the concept of intercultural sensitivity, the Intercultural Sensitivity Inventory (ICSI) was designed by Bhawuk & Brislin (1992) to measure sensitivity to the points of view of people of other cultures and the importance of cultural differences. The scale measured the ability of an individual to modify her/his behavior in intercultural contexts by examining each person's understanding of the different ways s/he can behave depending upon whether s/he is interacting in an individualistic or a collectivist culture, as well as her/his openmindedness concerning the differences they encounter in other cultures, and her/his flexibility concerning behaving in unfamiliar ways that are called upon by the norms of other cultures (Matsumoto & Hwang, 2013). Of importance to the current study, Bhawuk & Brislin (1992) examined the ecological validity of the ICSI by measuring the differences on the ICSI total score across diverse demographic variables. The study's subjects were assigned to one of four conditions, three of which involved cross-cultural training with culture theory, culture-general, or culture-specific–based cultural assimilators, and the fourth being a control group that received a reading assignment (Matsumoto & Hwang, 2013). Significantly higher scores on the ICSI were achieved by two of the three training groups compared to the control group. Similar to the previous scales' elemental constructs, the ICSI evaluates the concept of intercultural sensitivity—not wholly in line with this study's goals. However, auditing ICSI's constructs has provided useful theory toward the development of the current study's model.

The Multiple Personality Inventory (MPQ) most closely relates to the current study's goals. Van Der Zee & van Oudenhoven (2000) defined multicultural effectiveness as proficiently operating in a new cultural atmosphere, a feeling of psychological well-being in that atmosphere, and the ability to deal with and interest in individuals from a different culture. Based on their review of the literature, the authors examined the dimensions of Cultural Empathy, Openmindedness, Emotional Stability, Orientation to Action, Adventurousness/Curiosity, Flexibility, and Extraversion (Matsumoto & Hwang, 2013). Initial factor validation involved an EFA that identified a four-factor solution explaining 30.6% of the total variance in the data set (van Der Zee & van Oudenhoven, 2000). However, some of the original scales were deduced, resulting in final factors labeled Social Initiatives, Emotional Stability, Flexibility, and Openness. Many studies have reported correlations among the scale scores in the predicted studies involving different samples Factor Analysis have duplicated the five-factor structure of the MPQ, and at least one study has repeated the factor structure of the MPQ in two different cultural groups (Dutch and Italians) (Matsumoto & Hwang, 2013). Although over 30 studies used the MPQ scale for related topics, such as life satisfaction and psychological help, the constructs do not meet the demands of this current study's model. However, its validity evaluations and item and factor analyses offered value to the current study. Beyond interdisciplinary literature, industry-specific research was also explored to enlighten this study's model development.

#### 2.3.4 HTM Culture-Based Scale Development

This study's instrument not only relied on an interdisciplinary model development framework, but also employed scale and instrument development, industry-specific literature from the following seven wine-based domains in the hospitality and tourism field:

- Culture and preferences;
- Cross-national choice attributes;
- Wine-related lifestyles;
- Wine and well-being, health, and self-medication;
- Cross-national behavior;
- Anti-cross culture validation; and
- Cross-cultural competence tests.

To further compliment the interdisciplinary literature regarding scale development, research from the hospitality and tourism field was reviewed; this filed contained the most pertinent domain-focused scale development value for this wine-based study. The review identified numerous wine-based studies, but only ten manuscripts were selected for their wine-based cross-cultural and scale development value to serve as procedural guides to validate this instrument. The culture-based case study by Bernabeu, Diaz, Olivas, and Olmeda (2012) refined this study's response scaling according to wine consumer preferences. Evidence of validity was implemented in this study according to Brunsø and Grunert's (1995) development and testing of a cross-cultural instrument. Both Dolnicar's (2013) and Epstein, Santo, and Guillemin's (2015) guidelines for developing questions for cross-cultural adaptation contributed greatly to this study's instrument. Consumption measurement procedures were executed following Han, Back, and Barrett's (2010) assessment development study. Cross-cultural factors affecting convention and tourism participation decision-making that supported the measurement development scale of this study were noted from Jung-Eun and Chon (2008) and Lankford and Howard (1994).

Parasuraman, Zeithaml, and Malhotra's (2005) multiple-item scale development procedure was followed to support this study's multiple-item deduction process while Richins and Dawson's (1992) scale development and validation techniques clarified the consumer values orientation for materialism. Finally, the consumers' perception of the business environment scale from Ryu and Jang (2008) offered critical development procedures for this study. Once culturebased scale development literature was examined for relevance, the model development process continued with culture-based item development literature.

# 2.3.5 HTM Culture-Based Item Development

The focal point of this study, by means of a survey, was the item development. The final pool of items was used to measure the culture-based motivators to consume luxury wine. To assess the motivators to consume, this study utilized Bruck's (1985) three-element framework of consumer knowledge: *subjective knowledge* or consumers' self-perceived knowledge about the product category, *objective knowledge* or the factual knowledge about the product that is held in consumer's memory, and previous experience with the product.

Uniquely different from scale development, culture-based item development procedures were vetted from industry-specific literature (listed using their item titles) and organized into five groups. Although these five groups were not represented in the model, they were developed to organize the literature and items. Items were collected and contributed to the larger pool of this study's instrument items.

The item group titled *regular, premium, and luxury* contributed social class, fashion, tool for business, familiarity, friend recommendation, class level, wine as a gift, limited production, and foreign country (Cohen, Corsi, Lockshin, Bruwer, & Lee, 2017; Sjostrom, Corsi, & Lockshin, 2014).

The item group titled *emerging consumers and behavior* contributed confidence in knowledge, social currency, networking, environmental, high culture, authenticity, socially-acceptable, societal recognition, baijiu cup versus regular glass, inebriation in a business setting, face value, business values, networking, drinking in a group, expert recommendation, availability, and en premier (Barber & Taylor, 2013; Corsi, Mueller, & Lockshin, 2012; Euromonitor International, 2017; Mintel, 2017; International Organisation of Vine and Wine, 2017; Smith, 2007);

The item group titled *brand*, *price point*, *and packaging* contributed brand trendiness, brand promotions, taste and flavor, famous brand, lucky number in price, auction house, value for money, price, image, lucky number in the year, unique vintage, format, and information on shelf (Barber, Ismail, & Taylor, 2007; Corsi, Mueller, & Lockshin, 2012; Mueller, Lockshin,

Saltman, & Blanford, 2010; Mueller & Szolnoki, 2010; Orth & Malkewitz, 2008; Velikova, Howell, & Dodd, 2015; Villanueva, Carmen Garcia-Cortijo, Castillo, & García-Cortijo, 2016).

The item group titled *tourism branding* contributed discussing wine with friends after drinking, New and Old World styles, grape-growing region, prosperous health, country-of-origin, food pairing, prominent growing region, and winery impression (Cai, Gartner, & Munar, 2009; Taylor, Barber, & Deale, 2010; Taylor, Barber, & Deale, 2010; Zhang, 2016);

The item group titled *built or maintained marketing strategy* contributed marketing message, personal knowledge, previously purchased, personal values, han taste, expert rating, Moutai equivalent, pre-existing reputation, social media, earned award, and purchase inquiry (Goodman, 2009; Grunert, Perrea, Zhou, Huang, Sørensen, & Krystallis, 2011; Munar, 2013; Parboteeah, Taylor, & Barber, 2016). A comprehensive review of interdisciplinary scale development research and inventory tests, and HTM-specific culture-based scale development, and culture-based item development literature revealed the rationale to develop a new culture-based, luxury wine model.

# 2.4 Summary of Literature Review

The literature review included three over-arching areas: (1) an examination of the evolving nature of global wine preference; (2) an exploration of China's culture-based, socioeconomic rise and influence in the wine industry, called *The Chinese Phenomenon*; and (3) an analysis of the Chinese consumer through cross-cultural theory. A review of these three major areas provided an empirical and theoretical framework on which to develop the new model that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese. Subsequently, the procedures for developing the new scale warrant explanation.

# **CHAPTER 3. METHODOLOGY**

# 3.1 Rationale for New Model Development

Models are collections of items purposely integrated into a composite score to reveal levels of theoretical variables not readily observable by direct means (DeVellis, 2016). In order to justify the creation of a new culture-based luxury wine model, a thorough review of previous inter- and cross-cultural competence (3C) tests, models, and scales (from domains such as psychology, sociology, and education) was undertaken. This study's sample—business travelers that identify as culturally-Chinese—is exposed to other cultures, lives in other cultures, and interacts with those from cultures uniquely different from their own. Cross cultural attributes are elemental to clearly defining the business traveler that identifies as culturally-Chinese. The purpose of this study was to develop and validate a model that assesses the influence of Chinese cultural factors on Chinese business travelers' luxury wine selection decisions—a model titled "Culture-based Motivators to Consume Luxury Wine (LUXECULTR)".

Theoretically, models can help identify the psychological factors necessary for intercultural adaptation and adjustment (Matsumoto & Hwang, 2013), which in turn is needed to improve our understanding of the cultural richness and complexity behind *The Chinese Phenomenon.* This review not only confirmed that a culture-based luxury wine model has not been developed but also aided in a complete and cohesive model development process prior to proceeding to the instrument development stage. The intent of developing and validating LUXECULTR was so that the resulting developmental process might be adopted by other researchers who wish to explore the psychological, culture-based motivators to consume luxury products, including, but not limited to, wine. The results may also be implemented by industry stakeholders to create customized promotions tailored to consume needs.

Significant peer-reviewed articles were explored not only for their relevance to measuring culture, but also to determine their lack of fit with the culture-based factors and items measured in this study. Due to the nature of this new-model study, constructs (factors) were not specified in advance; an Exploratory Factor Analysis (EFA) was implemented to determine the key items and factors.

#### **3.2 Research Design**

This study applies a descriptive, survey methodology. Descriptive studies comprise postulating research questions and testing. This approach uses logical methods of deductiveinductive reasoning to develop generalizations and may apply randomization procedures for the intent of estimating error when population characteristics are implied from observed samples. Additionally, said methodology describes variables and procedures as completely and accurately as possible for replication purposes (Best & Kahn, 2006). Therefore, this study is designed to capture the most important culture-based motivators to consume luxury wine by business travelers that identify as culturally-Chinese by means of tested research questions, empirical methods and replicable statistical techniques.

Survey methodology examines subjects from a population using relevant techniques of survey data collection and methods to improve the number and certainty of survey responses (Kothari, 2004). Survey-based studies employ an instrument that asks one or more questions with a view toward making statistical inferences about the larger population under study based upon questions about the population (Kothari, 2004). Therefore, this study employed a sampling of Chinese business travelers who were contacted by two methods to voluntarily complete one online questionnaire survey from which population inferences were made.

#### **3.2.1 Research Questions**

The following four research questions underlie the development of this new model:

- RQ1 Which culture-based <u>items</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ2 Which culture-based <u>factors</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ3 What is the evidence of <u>reliability</u> for an instrument that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?
- RQ4 What is the evidence of <u>validity</u> for an instrument that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese?

#### **3.2.2 Population and Sample**

The convenience sample was recruited electronically and comprised of a global population of business travelers that identify as culturally-Chinese. Participating subjects met four demographic prerequisites: (1) at least 21 years of age, (2) identify as culturally-Chinese, (3) consumed wine at least once in the past year, and (4) travel for business and thus, were representative of the study's planned population. Regardless of which of the two data collection recruitment methods were used, all subjects accessed the same questionnaire hosted on the Qualtrics internet-based survey platform.

#### **3.2.3 Data Collection**

The survey was conducted electronically through the Qualtrics survey platform. An electronic survey was deemed appropriate given that the sample could conveniently access it regardless of personal and work schedules. Furthermore, the survey was designed to take less than 15 minutes to increase participation while traveling. Potential respondents were contacted by two methods, MTurk solicitation and electronic mail.

As a relatively inexpensive simple survey medium, MTurk permits both private and academic researchers to access a large number of survey subjects (Huff & Tingley, 2015). MTurk facilitates recruitment from a large and diverse pool of subjects and offers dynamic opportunities for inter- and cross-cultural research (Amir & Rand, 2012; Chandler, Mueller, & Paolacci, 2014; Leeper, 2016). Researchers cannot know the number of subjects on MTurk at a given time, however there is evidence that the demographic composition of MTurk workers can be fairly representative of large populations and far more diverse than traditional samples (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011; Hitlin, 2016; Sheehan, 2018).

Huff and Tingley (2015) describe MTurk as a "democratizing" force which allows researchers to gather responses that would otherwise be challenging given the high cost of professional survey firms. They found that subjects on MTurk are similar to respondents on other survey platforms (Huff & Tingley, 2015). Rand (2012) and Shapiro et al. (2013) stated that MTurk subjects' self-reports of demographic information are reliable, and their test-retest reliabilities are as high or higher than those from literature on a number of psychometric scales (Buhrmester, Kwang, & Gosling, 2011). Thomas (2017) posits the following: MTurk can provide researchers from a wide array of disciplines with data as reliable and valid as data collected in online interfaces and given the larger and more representative samples that MTurk can often provide, such results may have greater external validity than data obtained from other convenience samples. (pg. 185)

The following individuals and organizations were initially contacted to assist with recruitment through electronic mail and consisted of a network of industry professionals:

- Educational and professional leaders of alcohol-based, global, education-based organizations, such as four-year public universities;
- Leaders in both public and private, global, two-year colleges and four-year universities;
- Alcohol-industry consulting experts that have transitioned from the industry to the academe;
- Public and private global wine clubs;
- Culture-based and scholar-based public, global societies;
- Industry-based alcohol writers, bloggers, and experts in social media; and
- Administrators and operational managers in global alcohol distribution companies.

The survey consisted of three parts: introduction, instructions, and questions. The introduction explained the purpose of the study and listed the demographic prerequisites. The instructions explained the Likert rating procedures and defined key terms related to the study. Finally, to increase reliability, questions were randomized throughout four section blocks; each subject received randomly-ordered questions within randomly-ordered blocks. All complex terms were hyperlinked with either "mouse over" definitions or stated the definition next to the question. A reminder to "Please consider these questions in terms of the role luxury wine plays in business and prestige," in the form of a written banner was added to the top of each in-survey screen in all question blocks.

In accordance with Internal Review Board (IRB) procedures, the survey posed no major risk to the subjects. Other than the potential discomfort of completing an online survey or being asked to discuss personal perspectives about culture and wine, there was no anticipation that the subjects would experience any other discomfort or other negative feelings when responding to items in the survey. The subjects may have experienced unanticipated discomfort from using technology, completing a survey, or asked to evaluate personal opinions, but it would have been no greater than that experienced in daily life. Additionally, the subjects could discontinue participation at any time without penalty. Neither names nor other identifying information were obtained and the responses were completely anonymous and confidential.

Once the subject submitted the survey, the information was stored in the survey platform for subsequent data analyses. Upon download from the survey platform, it was stored on the researcher's personal computer that required a password for protection and was kept secured when not in use. The researcher only collected the answers provided and did not access other subject information, after which all information was transferred from the survey platform for analyses.

The survey was available in English and Chinese. Consideration for the subjects' languages and dialect were observed in the survey. Each subject was allowed to choose one of the two links: English or Chinese versions. To simultaneously achieve the highest reliable consistency of translation, subject comfort and protection, the official language (Putonghua) and dialect of Chinese was used for the instrument's initial and re-translation. When a subject started the survey, the survey platform systematically checked their web browser settings to see which language they used to browse the internet. If the survey was translated into their internet browser language, the appropriate translation was automatically used, placing most subjects in the correct translation. Subjects could have selected one language in which to complete the survey or switch to English at any point using a dropdown menu. The language dropdown menu was inserted into every page of the survey for convenience.

The Chinese translation of the survey was executed by a native, Chinese university instructor and validated for comprehension by another native Chinese university instructor. The Chinese version was then retranslated (test-retest) by two additional native Chinese university instructors. None of the four individuals were involved in the research design or data collection process.

#### **3.3 Instrument Development**

According to Czaja and Blair (2005), surveys are one of the most popular tools for social science investigations. Surveys are comprised of a structured or systematic set of data, typically called variables (de Vaus, 2002). The use of questionnaires or surveys provide a structured, straightforward way to organize and gather data.

Moreover, surveys permit researchers to illustrate characteristics about their sample, while still permitting the researcher to investigate causes of phenomena by comparing cases within the data (de Vaus, 2002). Researchers can then analyze survey data by means of statistical methods such as an analysis of variance, regression, or Factor Analysis in order to test research questions and discern the relationships between the variables upon which data has been collected (Czaja & Blair, 2005).

#### 3.3.1 Item Generation, Item Judgement, and Statistical Procedure

Item were first collected from the literature's tables of survey questions, if included. Second, articles were uploaded into a qualitative data analysis software called NVivo Pro version 12 (NVivo). The literature's texts were systematically evaluated in NVivo to find repeated words and themes that would contribute to the item pool. Third, each article was manually reviewed for items that neither appeared in a survey questions table nor were reported using NVivo. The preliminary item pool gathered from literature resulted in 121 independent items (independent variables). Due to the culture-based focus of this study, a university professor and expert in in cross-cultural competence was consulted three times to determine the inclusion of 21 cross- and inter-cultural items (see Table 2). The cross-cultural emphasis of this study enhanced the reliability of the items as they relate to the diverse cultural exposure experienced by the subjects while traveling globally for business.

Following eight stages of model development, 63 items were identified for the Exploratory Factor Analysis (EFA) (see Table 2). While all 63 items were used in the EFA, 20 items delivered the ideal model. Both the fifth (n = 1) and sixth statistical consultations (n = 1), by a native Chinese born university instructor and expert in Factor Analysis and a university professor and expert in Factory Analysis respectively, confirmed that the statistical software was used appropriately.

	Action			Outcome	
Stages in the	Performed		Item	Achieved at	Purpose Achieve
Process	in the stage	Outcome for each Stage	total	each Stage	at each Stage
1 Literature		Specify domains, Specify fields,		Items Defined	Strong theoretical
Review		Identify items, Identify factors	121		foundation
2 Item	Revise	Cross-cultural consultation $(N =$		First draft of	Content validity
Generation	instrument	1), Add 21 items	142	instrument	Construct validity
3 Expert	Revise	Statistical consultation 1 $(n = 1)$	142	Second draft of	Content validity
Validation	instrument	Industry consultation 1 ( $n = 2$ ),	1.2	instrument	Construct validity
, and all off	instrument.	Delete 29 items	113		construct valianty
4 Face	Revise	Focus group $(n = 11)$ , Add 5 items,	110	Third draft of	Face validity
Validation	instrument	Delete 24 items	94	instrument	Content validity
					Construct validity
5 Expert	Revise	Statistical consultation 2 ( $n = 2$ ),		Fourth draft of	Content validity
Validation	instrument	Add (1) item	95	instrument	Construct validity
Vandation		Industry consultation 2 $(n = 3)$ ,	20		
		Delete 22 items	73		
		Industry consultation 3 ( $n = 2$ ),			
		Add 10 items	83		
		Industry consultation 4 $(n = 2)$ ,			
		Delete 13 items	70		
		Statistical consultation 3 $(n = 1)$ ,			
		Delete 7 items	63		
		Statistical consultation 4 $(n = 1)$	63		
		Statistical consultation 5 $(n = 1)$	63		
		Statistical consultation 6 $(n = 1)$	63		
				Fifth draft of	Face validity

# Table 2. Model Development and Testing Process

7 EFA	Revise	Principal axis factoring	Sixth draft of	Reliability
	instrument	Oblique rotation	instrument	Factor structure
8 CFA	Revise	Finding goodness of fit of the model	Final version of	Reliability
	instrument	Calculating indices of model fit	instrument	Construct validity
				Factor structure
				validity

# Table 2 continued

# **3.3.2 Measurements**

Gliem and Gliem (2003) describe the applicability of Likert-type scales: "Oftentimes information gathered in the social sciences, marketing, medicine, and business, relative to attitudes, emotions, opinions, personalities and descriptions of people's environment involves the use of Likert-type scales" (p. 82). Maas (1998) and Kerlinger (1986) state it is a clearly established fact that the validity and reliability of quantitative research is closely linked with the validity and reliability of the instrument applied. This increase in reliability is said to level off when seven-point steps—compared to three or five scale steps—are used (Lissitz & Green, 1975). Each of the item questions in this study's survey employed a seven-point Likert scale rating. The questions used importance-value verbs supported by Vagias (2006) between 1 (not important/acceptable/agreeable) through 7 (very important/acceptable/agreeable) toward the final goal: consuming luxury wine. *Consuming* was defined in the survey instructions as purchasing, tasting, or presenting luxury wine to another individual or group for immediate—or later—consumption and *luxury* wine was defined in the survey instructions as a single 750 milliliter bottle that may be purchased for CNY ¥680+ (USD \$100+).

The question-portion of the survey consisted of 63 items that measured the importance of motivators to consume luxury wine (see Table 3).

Num	Item as Survey Question
1	Is it acceptable to drink wine from a traditional small (baijiu) cup?
2	Is it acceptable to become inebriated or drunk in a business setting?
3	Is it acceptable to talk about wine with friends or relatives after drinking?
4	Is it acceptable to use wine as a gift (such as, for your boss or business partner)?
5	When you purchase luxury wine, how important is the wine's availability in a common grocery store or market?
6	When you purchase luxury wine, how important is the brand's trendiness, acclaim, or popularity?
7	When you purchase luxury wine, how important is the message you get from the wine's marketing and advertising?
8	The wine you drink reflects your socially-constructed face value (miànzi), such as the title of a person, in a group setting.
9	The wine you drink impacts your personal social status or class.
10	Do you agree that sparkling wine, like champagne, is important in the world of wine?
11	Do you agree that confidence in your wine knowledge is important?
12	Do you agree that a lucky number in the price of luxury wine is important?
13	How important is it that the wine is from a country that produces New World style (for example, Australia or the United States)? New World style is interpreted as tasting riper, having higher alcohol, having less acidity, and fruitier. Countries include: The United States, Australia, South Africa, Chile, Argentina, and New Zealand.
14	How important is it that you previously purchased, tasted, or consumed luxury wine before purchasing it?
15	How important is it that the wine is from a country that produces Old World style wines (for example, France or Italy)? Old World style is interpreted as tasting lighter, having less alcohol, having higher acidity, and less fruity. Countries include: France, Italy, Spain, Portugal, Greece, Austria, Hungary, and Germany.
16	How important is it that the wine play a significant role in a region's wine tourism; for example, the importance of Lafite to the Bordeaux region?
17	How important is it that the wine reflect your personal values (for example, strength, innovation, power, uniqueness, and wealth)?
18	How important is it that luxury wine has a high sugar level (for example, the increased sweetness of Luzhou Laojiao baijiu, a Red Bull and vodka cocktail, or Huangjiu wine from Zhejiang)?
19	How important are a wine brand's promotional activities, advertising, and marketing?
20	How important are the sensory values of taste and flavor?
21	Do you agree that an expert, critic, or writer rating is important to your purchase?

Table 3. Survey Questions

22	Do you agree that wine fulfills a medicinal role in Traditional Chinese Medicine (TCM)?
23	Do you agree that brand authenticity (not counterfeit or a fake) is important?
24	Do you agree that your wine knowledge is important to your wine purchase?
25	Do you agree that fashion (for example, Louis Vuitton and Christian Dior) and luxury wine complement each other?
26	Do you believe that luxury wine reflects the exchange of strong personal favors in order to build good social currency (rénqíng)?
27	Do you believe that an environmentally-organic, -sustainable, or -biodynamic certification is important?
28	Do you believe that a positive reputation for the wine's country-of-origin (where the wine was produced) is important?
29	Do you believe that using wine as a tool to conduct business is important?
30	Is it important that you purchase the wine consumed by high culture, such as celebrities and the social elite?
31	Is it important that luxury wine's face value (miànzi) power is approximately equivalent to Moutai (acclaimed Chinese liquor)?
32	Is it important that the wine represent a feeling for what is appropriate and socially- acceptable in culture?
33	Is it important that luxury wine express your business' (or employer's) values (for example, profitable, traditional, or innovative)?
34	Is it important that the wine is sold exclusively at an auction house?
35	How important is the varietal or type of grape (for example, Cabernet Sauvignon, Riesling, and Sauvignon Blanc)?
36	How important is the strong visual image portrayed on the bottle's label?
37	How important is pairing or matching the wine with food?
38	How important is a lucky number in the vintage (year bottled)?
39	When you purchase luxury wine, is it important that the wine is sold early (pre-sold before bottling and releasing to the market [en premier])?
40	When you purchase luxury wine, is it important that society is familiar with the wine, but only a few can afford it?
41	When you purchase luxury wine, is it important that the wine is from a prominent growing region, such as Bordeaux, Tuscany, or Napa?

Table 3 continued

42	When you purchase luxury wine, is it important that the wine's brand, or name brand, is famous and easily recognized?
43	Do you believe that wine has the ability to create friendly relationships and develop personal bonds in order to build good networking (guanxi)?
44	Do you believe that wine has the ability to affect the opportunity to be recognized in society?
45	How important is the pre-existing reputation of the wine?
46	How important is the overall impression of the winery that produced the wine?
47	How important is drinking in a group?
48	How important is value for the money you pay for the wine?
49	How important is a unique vintage (year bottled)?
50	How important is price to your luxury wine purchase?
51	How important is the influence of wine information in the media, including social media such as Sina- and Tencent-Weibo, WeChat, or Renren?
52	How important is the format, size, or quantity of wine in a bottle?
53	How important is a recommendation by a sommelier or wine expert?
54	How important is a wine medal or award?
55	How important is brand (for example, prestigious wine brands like Château Lafite Rothchild or Château Margaux)?
56	When you purchase luxury wine, is the information presented on the store shelf important?
57	When you purchase luxury wine, is a significant Chinese growing region (such as Ningxia, Shandong, or Xinjiang) important?
58	When you purchase luxury wine, is it important to have a recommendation from someone you know?
59	When you purchase luxury wine, is your familiarity with the country of origin (where the wine was produced) or growing region important?
60	Do you agree that your luxury wine purchase is influenced by a celebration or meaningful occasion?
<i>c</i> 1	Do you agree that a limited production of the wine (such as 15,000 versus 300,000 cases) is important?
61	
61 62	Do you agree that selecting wine imported from a foreign country is important?

*Note*. Item number and questions are displayed in random order.

#### **3.4 Data Analysis**

Recruitment was initiated through two electronic means, MTurk and electronic mail; nevertheless, all subjects accessed the same instrument. After a review of the data's descriptive results (mean, medians, modes, variances, skewness, and scatter plots), a t-test was used to measure equivalency of responses—between (1) those that reached the survey via MTurk and (2) those that reached the survey via electronic mail—and support the reliability of the two proportions of the entire data set. Seven items (out of 63) lacked equivalency between the portions following the results of the t-test; however, the natural item-deduction EFA process resulted in the removal of these items anyway.

The raw data were gathered from the Qualtrics survey platform and formatted for statistical analysis. All analyses were conducted using SPSS version 25 followed by LISREL version 9.2. The statistical procedures used included descriptive statistics (SPSS), Exploratory Factor Analysis (SPSS), and Confirmatory Factor Analysis (LISREL).

Factor Analysis (FA) is a statistical method used to confirm or identify a smaller number of latent factors (or constructs) from a large number of observed items (or independent variables) (Kahn, 2006). There are two main categories of Factor Analysis: exploratory and confirmatory. Although researchers may implement Factor Analysis for a variety of purposes, one of the most universal uses of factor-analytic techniques is to scaffold the validity of newly developed models; particularly, does the newly developed model measure the intended factors? The employment of Factor Analysis to a group of items may assist researchers to answer the following questions: How many factors determine the underlying set of items and what are the defining features of the factors that underlie the set of items (Tabachnick & Fidell, 2001)?

The overall intent of FA, under which one will find both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), is to determine the number and nature of latent factors that justify the variation and covariation among a group of observed measures, commonly referred to as the items (Brown, 2006). Two main logical uses for FA in the current study include the following:

- Data reduction through an EFA that reduces a larger set of intercorrelated items into a smaller set of composite items, using composites as factor scores, as the units of analysis in subsequent statistical tests and
- Factor validation through a CFA that obtains evidence of validity by demonstrating that the items of selected factors load onto separate factors in the expected manner (Brown, 2006).

EFA determines the construct validity during the initial development of an instrument. EFA is a data-driven approach such that no assumptions are made in regard to the number of items and factors; it identifies the relevant number of common factors and determines which measured items are justifiable indicators of the latent factors (Brown, 2006). After developing an initial pool of items, researchers employ EFA to explore the underlying factors of the item set. Hence, they can group a large item group into purposeful subsets that measure different factors. The primary reason for using EFA is that it allows items to be related to any of the factors underlying sample responses (Kahn, 2006). Effectively using EFA procedures requires researchers to use inductive reasoning, while subtly and patiently modifying and readjusting their strategy to develop the most substantial results (Brown, 2006; Kahn, 2006). Therefore, the process of model development using EFA is an effective process of examination and revision, followed by more examination and revision, ultimately leading to a tentative rather than a definitive outcome (Kahn, 2006).

Unlike EFA, CFA utilizes a strong conceptual or empirical foundation to guide the evaluation and specification of the factor model (Brown, 2006). Brown (2006) explains in an ideal research situation, EFA is used early in the process of item development and factor validation, while CFA is used in later phases after the underlying structure has been established on prior EFA and theoretical grounds. CFA requires the researcher to specify both the pattern of indicator-to-factor loadings and factors in advance, not to mention other parameters such as those bearing on independence or covariance of the factors (Brown, 2006). Due to the items constraint to load on only one factor in CFA, it is widely advised not to explore whether a given item measures no factors, one factor, or multiple factors but instead to evaluate or confirm the extent to which the researcher's measurement model is validated and replicated in the sample data (Kahn, 2006). So, it is crucial to have prior knowledge of the assumed relationships between factors and items before initiating CFA, thus the term confirmatory (Brown, 2006).

Items were gathered from literature and deduced through an EFA (Part 1: initial validation) to answer the first research question: *Which culture-based <u>items</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese*? Following the determination of factors and items that express the magnitude and size of each factor in Part 1, the results were validated through a CFA (Part 2: final validation) to answer the second research question: *Which culture-based <u>factors</u> measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese*? Underlying the development of a new model is an emphasis on the Factor Analysis reliability and validity measures.

#### **3.4.1 Reliability and Validity Analysis**

Assessing the reliability of a model, or the ability to repeat the methods and yield the same or similar results across time, is a foundational element of quality research. Internal validity is the ability of the instrument used in the research to accordingly fulfill its purpose in the study. External validity supports the idea that the study's results can be generalized beyond the immediate study.

Empirical evidence is mixed on whether questions are more valid and reliable with more or less response options; a number of studies conclude that the number of response options does not affect reliability, others have come to the opposite conclusion (Dolnicar, 2013). The same is the case for validity, researchers have deduced that validity is improved if more answer options are presented. Studies are problematic because they vary in their definitions of reliability and validity and do not decompose systematic method variance and trait variance (Chang, 1994). They provide scales with more response options an advantage caused purely by computational reasons, specifically the restriction of range effect (Martin, 1973, 1978; Nunnally Jr, 1970) which affects correlation-based measures such as Cronbach's alpha and test–retest measures (Dolnicar, 2013). Statistical analysis programs contain thresholds, limits, and tests to confirm a model's reliability and assist with the development of quality research. The following reliability tests were undertaken to establish the fit of the model while simultaneously enhancing the innate statistical analysis program reliability tests: individual item absolute [loading] value, Cronbach's coefficient alpha (Cronbach's  $\alpha$ ), CFA visual model (see Figure 1), error estimates, chi-square test ( $\chi^2$ ), goodness of fit (GFI), [Non] Normed-Fit Index (NNFI), Incremental Fit Index (IFI),

Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Root Mean Square Residual (RMR).

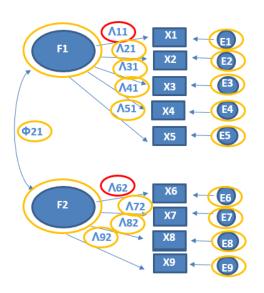


Figure 1. Example of a CFA model.

A precise and efficient measure is one in which the constructs have a strong theoretical foundation, supported by empirical data that strengthens construct validity (Clark & Watson, 1995). Construct validity is the extent to which a scale measures what it intends to measure. Securing construct validity entails specifying the domain of the construct, empirically determining the extent to which items measure that domain, and examining the extent to which the measure produces results that are predictable from theoretical hypotheses (Hinkin, 1998; Nunnally, 1978). Construct validity thus provides the link between theory and psychometric measurement (Hinkin, 1998). Loevinger (1957) clarifies that construct validity is composed of internal and external validity. Substantive and structural validity together constitute internal validity. The substantive component of validity is the extent to which the content of the items in the test can be accounted for in terms of the construct and context of measurement. Substantive validity is achieved through developing a precise and detailed conception of the constructs, based on a thorough literature review, and brief, formal descriptions of the constructs to crystallize the conceptual model (Clark & Watson, 1995).

### 3.5 Summary of Methodology

Once a rationale for a new model was defined, research questions and purpose were used as guides to design this study. The model relied on eight stages of development including initial item generation from literature; expert cross-cultural, industry, and statistical consultations for construct and content validity; seven instrument revisions; two qualitative studies for face validity; and three statistical analyses for reliability that resulted with a new model that measures the motivators to consume luxury wire by business travelers that identify as culturally-Chinese.

### **CHAPTER 4. FINDINGS**

The objective of this study was twofold: first, to deduce the culture-based items and factors that measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese (Part 1: initial validation) and second, to confirm the culture-based items and factors that measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese (Part 2: final validation).

The findings are presented in two sections. The first section presents the sample's descriptive statistic results. The second section presents LUXECULTR's (Culture-based Motivators to Consume Luxury Wine) item and factor deduction results including the response screening and testing results, item deduction results, model fit results and internal consistency of factors, and the Confirmatory Factor Analysis (CFA) model.

### 4.1 Sample Profile

Five-hundred and twenty-two subjects initiated the survey. Following response screening and testing results (see section 4.2.1), the final data set contained 350 responses. The average subject took 14.3 minutes (SD = 7.9) to complete the survey, within a range of 5.9 to 56.4 minutes (see Table 4). The average respondent age was 49 years old (SD = 7), the youngest subject was 35 and the most mature was 71. The gender (N = 349) was 67% male/man (n = 234), 26% female/woman (n = 91), and 7% transsexual (n = 24) (see Table 5).

Item	Ν	Min	Max	М	Mdn	Mode	SD
Time in minutes to complete the survey	350	5.9	56.4	14.3	11.9	7.8	7.9
What is your age?	336 <sup>a</sup>	35	71	49	46	45	7
How many years have you spent living in another cultural setting?	345	0	66	8	5	5	11
How many domestic trips a year do you travel for business?	348	0	88	7	5	5	9
How many international trips a year do you travel for business?	344	0	132	4	2	2	9
What is your personal wine knowledge rating?	347	0	10.0	6.4	6.8	7.5	2.0
Which is consumed more in a business setting: baijiu or grape wine?	348	1.1	10.0	6.8	7.0	5.1	1.9
How much do you pay on average for a bottle of wine for business consumption (not for personal, private consumption)? <sup>c</sup>	282 <sup>b</sup>	10	2500	126	80	50	190

Table 4. Continuous Demographic Descriptive Statistics

<sup>b</sup> Subjects chose not to respond, n = 68.

<sup>c</sup> Subjects were requested to choose one of two monetary responses: CNY ¥ or USD \$; all statistics in Table 4 are in USD \$.

Survey Question	Ν	п	<mark>p</mark> ̂
What is your gender	349		
Male/Man		234	67
Female/Woman		91	26
Trans Female/Trans Man		24	7
What is your ethnicity?	348		
Han Chinese		190	54
Asian		81	23
European		49	14
Other (Indian [12], Latino [10], African [5], and Pilipino)		28	8
What is your education level? <sup>a</sup>	350		
Less that a secondary degree (for example, a senior middle school,		8	2
vocational, secondary professional, or international degree)		0	2
Earned a secondary degree (for example, a senior middle school,		42	12
vocational, secondary professional, or international degree)		42	12
Earned an undergraduate (university) degree		143	41
Earned a postgraduate, graduate (university) degree		147	42
Earned a postgraduate, doctorate degree		10	3
What is your personal income per year? <sup>b</sup>	350		
Less than CNY ¥ 68,500 (USD \$10,000)		47	13
CNY ¥68,500 - 205,999 (USD \$10,000 - 29,999)		46	13
CNY ¥206,000 - 342,999 (USD \$30,000 - 49,999)		67	19
CNY ¥343,000 - 479,999 (USD \$50,000 - 69,999)		74	21
CNY ¥480,00 - 616,999 (USD \$70,000 - 89,999)		47	13
CNY ¥617,000 - 890,999 (USD \$90,000 - 129,999)		35	10
CNY ¥891,000 - 1,164,999 (USD \$130,000 - 169,999)		24	7
CNY ¥1,165,000 - 1,439,000 (USD \$170,000 - 210,000)		4	1
More than CNY ¥1,439,000 (USD \$210,000)		6	2

Table 5. Categorical Demographic Descriptive Statistics

Note.

Response choices are ordered from highest to lowest frequency.

<sup>*a*</sup> Frequency listed by least to most education.

<sup>*b*</sup> Frequency listed by smallest to highest annual income range.

 $\hat{p}$  = Proportion of the sample; percentages are rounded.

Survey Question	Ν	п	<i>p</i> ̂
In which country do you permanently reside?	350		
The U.S.A.		216	62
China		124	35
Hong Kong (S.A.R.)		5	1
Other (Armenia [2], Albania, Angola, and Azerbaijan)		5	1
For which business-company do you work or own?	350		
Private Enterprise; Non-State-Owned Enterprise, or Civilian-Owned Enterprise		127	36
Individually-Owned, Small Private Company, or Sole Trader		54	15
Representative Office (Rep Office)		47	13
State-Owned Enterprise (SOE)		44	13
Joint Venture (JV)		37	11
Wholly Foreign-Owned Enterprise (WFOE or WOFE)		31	9
Other (No Response [4], Manufacturing [2], Information Technology, Distribution, Education, Self-employed)		10	3
Can you easily access the luxury wine you want?	350		
Yes		277	79
No		73	21
How often do you consume wine for business (not for personal, private consumption)?	350		
Once a month		100	29
2-3 times a month		88	25
Once a week		79	23
Every 2-3 months		48	14
More than once a week, but not everyday		22	6
Every day		9	3
Every 3-12 months		4	1
English or Chinese survey version	350		
English		311	89
Chinese		39	11

Table 5 continued

Note.

Response choices are ordered from highest to lowest frequency.

 $\hat{p}$  = Proportion of the sample; percentages are rounded.

The sample ethnicity (N = 348) was 54% Han Chinese (n = 190) and 23% Asian (n = 81); the subject was presented with two ethnic choices on the survey: Han or Other [with fill-in text box]. The average education degree earned (N = 350) was 42% graduate (n = 147) and 41% undergraduate (n = 143). The annual personal income (N = 350) consisted of 21% who reported earning between USD \$50,000 to 69,999 (n = 74) and 19% who earned \$30,000 to 49,999 (n = 67). Regarding permanent residence (N = 350), an average of 62% resided in the U.S.A. (n = 216) and 35% resided in China (n = 124). The sample spent an average of eight years (SD = 11) living in another culture setting, between zero and 66 years (see Table 4).

Regarding the business-company for which they worked or which they owned (N = 350), 36% stated that they worked for a Private Enterprise that is a Non-State-Owned or Civilian-Owned Enterprise (n = 127) (see Table 5). The average number of domestic business trips per year was seven (SD = 9), with a range from zero to 88 (see Table 4). Global, or international trips per year averaged four (SD = 9), with a spread ranging between zero and 132 trips.

The average personal wine rating—between *basic* (know grape varieties and differences between red and white) and *expert* (know appropriate service rules, specific wine blends, food and wine pairings, and specific vineyards and importers) measured from zero to 10 respectively—was 6.4 (SD = 2). The average toggle-rating (numbers hidden from the subject during the survey) between which is consumed more in a business setting, baijiu (zero) or wine (10), was 6.8 (SD = 1.9). Easy access to luxury wine (N = 350) was confirmed by 79% (n = 277) and a challenge by 21% (n = 73) (see Table 5).

The sample paid an average of USD \$126 (SD = 190) for a bottle of luxury wine for business, ranging from a low of USD \$10 to a high of \$2,500 (see Table 4). Business wine consumption frequency (N = 350) was 29% once a month (n = 100), 25% 2 to 3 times a month (n = 88), and 23% once a week (n = 79) (see Table 5). Out of the total survey language version selections (N = 350), 89% selected the English version (n = 311) and 11% selected the Chinese version (n = 39).

### **4.2 Model Item and Factor Deduction Results**

Underlying the final survey design were suggested Factor Analysis design objectives for the creation of an ideal data set, item loading, and factor development result. Three to five factors are ideal to develop a new model with eight to 10 items per factor. This would result in a minimum of 40 to 50 survey questions. To balance the construction of a reliable and valid model against bias concerns (such as the reduced quality due to fatigue from taking a survey), increased quality, and increased participation rate (Hardy & Kosomitis, 2005; Johnson, Lehmann, & Horne, 1990; J. R. Rossiter, Dolnicar, & Grün, 2010), the final pool was limited to 63 items.

In many situations using Factor Analysis, one-half of the sample is analyzed using EFA, the other half using CFA. In this case, the consultants suggested analyzing the entire sample first using EFA, followed by analyzing the entire sample again using CFA. Numerous Factor Analysis articles suggested and supported this method (Brown, 2006; Byrne, 2013; Dolnicar & Grün, 2013; Levesque-Bristol & Cornelius-White, 2012). Accordingly, this study employed the same data analyses approach.

### 4.2.1 Response Screening and Testing Results

A series of tests—using the Statistical Package for Social Sciences (SPSS) version 25—was undertaken to evaluate the reliability of all 522 responses that initiated the survey prior to proceeding with the EFA. The following result was 350 reliable cases that formed the dataset.

Frequency and descriptive statistics were evaluated for cases with missing data. Often, researchers want to retain all cases, even if missing data is detected. One option is to estimate or conduct a pairwise correlation analysis to measure the potential to retain a case with missing data (Brown, 2006; Tabachnick & Fidell, 2001). To increase reliability of the model, all 78 cases with one or more missing responses were removed; analyses with the outliers was not performed.

There are four reasons for multivariate outliers: (1) incorrect data entry, (2) the failure to specify missing values in the computer syntax so missing values are read as real data, (3) the outlier is not member of population that you intended to sample, and (4) the outlier is representative of population you intended to sample but the population has more extreme [Mahalanobis] scores than a normal distribution (Tabachnick & Fidell, 2001). The Mahalanobis Distance (MD) test is used to detect outliers which have a greater MD score compared to the rest of the sample population of responses (de Maesschalck, Jouan-Rimbaud, & Massart, 2000). The MD considers and corrects the correlation, which is calculated using the inverse of the variance–covariance matrix. Todeschini (1994) explains a high score—one above the key critical chi-square value—relates to a response that has a relatively [too] large influence on the estimated regression parameters such as response, regression coefficient, and standard error. The

Mahalanobis test removed 94 cases with a critical chi-square value greater than 82.529 (df = 63;  $\alpha = 0.05$ ). Once the response [data] cleaning was completed, the model's specific indices were evaluated for model fit.

If the determinant of *R* and *eigenvalues* associated with some factors approach zero, multicollinearity or singularity may be in present (Brown, 2006; Tabachnick & Fidell, 2001). While *R* did not approach zero (R = .467, .514, .951), over 28 dimensions had *eigenvalues* that approached zero. Thus, multicollinearity or singularity was assumed to be in existence. Multicollinearity or singularity was initially tested by observing each item's *tolerance* values under the *collinearity statistics*. Desirable *tolerance* values should be closer to one. All of this study's item *tolerance* values were closer to zero; therefore, the *squared multiple correlations* (*SMCs*) of each item was calculated. Desirable *SMCs* are closer to zero—if any of the *SMCs* are one, then singularity is present. Singularity was not detected. If any of the *SMCs* are near one, then multicollinearity is present. Over 28 items had *eigenvalues* that approached zero; so, multicollinearity may have existed but was further tested by observing the *conditional index*.

The *condition index* for each item with a low *tolerance* value was observed. Desirable *condition index* values should be greater than 30. Sixty-one items were above 30. Due to the high *condition index* values, the *variance proportion* was observed. Ideally, no two *variance proportions* under the same item should be greater than .50. There were not two *variance proportions* that were greater than .5 on any item; thus, the results failed to demonstrate evidence of multicollinearity.

On the other hand, when results of the above-mentioned test are combined (explored through the *squared multiple correlations (SMC)* [observed], *tolerance* values [observed], *condition index* [observed], and *variance proportions* [not observed]) and considered wholly, there was evidence of multicollinearity for most items. Multicollinearity did not reduce the predictive power or reliability of the model as a whole, at least within the sample data set; it only affected calculations regarding individual items (Brown, 2006; Hatcher, 1994; Kahn, 2006). Multicollinearity indicated how well the entire bundle of items predicted the outcome factor, but it may not have given valid results about any individual item, or about which items were redundant with respect to others.

Normality among individual items was determined by skewness and kurtosis. Consideration arises when the skewness statistic divided by its standard error of skewness is greater than  $z = \pm 3.29$  (p < .001, two-tailed test). Skewness of 62 items was not within the  $\pm 3.29$  limit. Consideration further arises when the kurtosis statistic divided by its standard error of kurtosis is greater than  $z = \pm 3.29$  (p < .001, two-tailed test) (Tabachnick & Fidell, 2001). The kurtosis of 13 items was not within the  $\pm 3.29$  limit. Although many items' skewness and kurtosis exceeded normality and supported multicollinearity, the ability of the united items to have explained a factor was considered successful while each time, when evaluated individually, did not express normality (Tabachnick & Fidell, 2001). In other words, if the items are removed from their designated factor, they may appear to be similar; however, when grouped to a factor, the items have the ability to define both similarities and differences between the factors.

Finally, linearity among pairs of variables was evaluated through a visual inspection of scatterplots. Examination of all pairwise scatterplots was impractical for 63 items; hence, linearity spot checks were examined for four pairs of variables (Tabachnick & Fidell, 2001). The x-axis variables were those with the strongest negative skewness against y-axis variables, or those with the strongest positive skewness. Linearity was confirmed.

While conservative screening removed 172 unreliable response cases, the abovementioned tests suggest the potential for removing certain items; however, they were retained to further explore their appropriateness for this model by way of Exploratory Factor Analysis. In addition, all 63 items were retained as part of the preliminary model development process and the EFA was initiated, among other analyses, to prospectively confirm the removal of individual items.

The validity tests (from Chapter 3) and instrument delimitations (from Chapter 1) refined the accuracy of the instrument, that it measured what it was intended to measure and demonstrated validity of a new model. Research question number four, which defined the evidence of <u>validity</u> for the model that measures the motivation to consume luxury wine by business travelers that identify as culturally-Chinese, was addressed by content, face, ecological, and construct validity tests.

### **4.2.2 Item Deduction Results**

Part 1 was to empirically develop and statistically analyze, through model development literature and an Exploratory Factor Analysis (EFA), a new model. All items were selected from research studies previously identified and, where necessary, slightly modified to fit the context of this study. Following additional content, face, ecological, and construct validity tests within the confines of this study, the final pool of 63 items were prepared for the EFA (see Table 3). The data set was coded, independent variables were assigned titles, and the software-based deduction analysis using SPSS was used for analysis.

A Principal Component Analysis (PCA) was executed first with an Oblimin (nonorthogonal [oblique]) rotation to extract three factors that identified 20 out of the 63 items to define this model that measured the motivation to consume luxury wine by Chinese business travelers (see Tables 6 and 7).

Item Title	Item as Survey Question
Brand Trendiness	When you purchase luxury wine, how important is the brand's trendiness, acclaim, or popularity? [6]
Face Value	The wine you drink reflects your socially-constructed face value (miànzi), such as the title of a person, in a
	group setting. [8]
Style Assimilation	Do you agree that sparkling wine, like champagne, is important in the world of wine? [10]
Lucky Number in Price	Do you agree that a lucky number in the price of luxury wine is important? [12]
Han Taste	How important is it that luxury wine has a high sugar level (for example, the increased sweetness of
	Luzhou Laojiao baijiu, a Red Bull and vodka cocktail, or Huangjiu wine from Zhejiang)? [18]
Prosperous Health	Do you agree that wine fulfills a medicinal role in Traditional Chinese Medicine (TCM)? [22]
Social Currency	Do you believe that luxury wine reflects the exchange of strong personal favors in order to build good
	social currency (rénqíng)? [26]
High Culture	Is it important that you purchase the wine consumed by high culture, such as celebrities and the social
	elite? [30]
Moutai Equivalent	Is it important that luxury wine's face value (miànzi) power is approximately equivalent to Moutai
	(acclaimed Chinese liquor)? [31]
Socially-acceptable	Is it important that the wine represent a feeling for what is appropriate and socially-acceptable in culture?
	[32]
Pairing Suggestion	How important is pairing or matching the wine with food? [37]
Luck Number in Vintage	How important is a lucky number in the vintage (year bottled)? [38]

# Table 6. Final 20 Items Identified by EFA and Applied in CFA

## Table 6 continued

Easily Recognized	When you purchase luxury wine, is it important that the wine's brand, or name brand, is famous and easily recognized? [42]
Networking	Do you believe that wine has the ability to create friendly relationships and develop personal bonds in order to build good networking (guanxi)? [43]
Social Media	How important is the influence of wine information in the media, including social media such as Sina- and Tencent-Weibo, WeChat, or Renren? [51]
Expert Recommendation	How important is a recommendation by a sommelier or wine expert? [53]
Chinese Grape Region	When you purchase luxury wine, is a significant Chinese growing region (such as Ningxia, Shandong, or Xinjiang) important? [57]
Purchase Inquiry	Do you agree that your luxury wine purchase is influenced by a celebration or meaningful occasion? [60]
Imported Luxury	Do you agree that selecting wine imported from a foreign country is important? [62]
Social Status	Do you agree that luxury wine reflects upon your social status or class level? [63]

Item Title	N	М	SEM	SD	s <sup>2</sup>
Purchase Inquiry	350	5.01	0.078	1.466	2.149
Style Assimilation	350	5.13	0.072	1.353	1.830
Brand Trendiness	350	5.09	0.078	1.456	2.121
Face Value	350	5.22	0.070	1.313	1.723
Social Status	350	5.10	0.077	1.442	2.079
Lucky Number in Price	350	4.72	0.094	1.763	3.109
Han Taste	350	4.76	0.083	1.545	2.388
Prosperous Health	350	4.84	0.082	1.529	2.339
Social Currency	350	5.15	0.071	1.335	1.781
High Culture	350	4.95	0.090	1.681	2.825
Moutai Equivalent	350	4.98	0.081	1.523	2.320
Pairing Suggestion	350	5.29	0.075	1.399	1.958
Luck Number in Vintage	350	4.69	0.093	1.738	3.022
Easily Recognized	350	5.11	0.081	1.507	2.271
Networking	350	5.23	0.071	1.322	1.747
Socially-acceptable	350	5.09	0.075	1.397	1.952
Social Media	350	4.91	0.086	1.600	2.561
Expert Recommendation	350	5.16	0.076	1.417	2.007
Chinese Grape Region	350	4.82	0.084	1.564	2.446
Imported Luxury	350	5.00	0.077	1.444	2.086

Table 7. Item Descriptive Statistics

Note.

SEM = Standard error of the mean

 $s^2$  = Sample variance

The *correlation matrix* included several sizable correlations; 28 correlations were above .500 (see Table 8). The expected size depends, to some extent, on the sample's number (larger sample sizes tend to produce smaller correlations), but if no correlation exists above .300, the use of FA is questionable because there is probably nothing to factor analyze (Tabachnick & Fidell, 2001). Out of the 190 correlations, the *correlation matrix* revealed that only 12 correlations (see

Table 8) were below .300; therefore, due to the very high item loadings, FA was an ideal model analysis.

Item Title	1	2	3	4	5	6	7	8	9	10
1 Purchase Inquiry	$\delta_{11}$									
2 Style Assimilation	0.307	$\delta_{22}$								
3 Brand Trendiness	0.425	0.358	δ33							
4 Face Value	0.392	0.377	0.534	$\delta_{44}$						
5 Social Status	0.395	0.328	0.527	0.594	$\delta_{55}$					
6 Lucky Number in Price	0.393	0.370	0.404	0.444	0.443	$\delta_{66}$				
7 Han Taste	0.325	0.311	0.384	0.347	0.309	0.490	$\delta_{77}$			
8 Prosperous Health	0.424	0.304	0.444	0.475	0.424	0.470	0.470	$\delta_{88}$		
9 Social Currency	0.459	0.340	0.405	0.453	0.409	0.446	0.332	0.410	δ99	
10 High Culture	0.388	0.302	0.502	0.492	0.564	0.449	0.407	0.507	0.490	$\delta_{1010}$
11 Moutai Equivalent	0.417	0.385	0.483	0.464	0.432	0.508	0.449	0.536	0.512	0.557
12 Pairing Suggestion	0.406	0.372	0.328	0.342	0.378	0.312	0.247	0.326	0.466	0.364
13 Lucky Number in Vintage	0.374	0.323	0.470	0.437	0.472	0.644	0.508	0.496	0.460	0.521
14 Easily Recognized	0.500	0.239	0.460	0.479	0.492	0.432	0.344	0.517	0.432	0.643
15 Networking	0.402	0.290	0.330	0.366	0.349	0.291	0.251	0.384	0.392	0.368
16 Socially-acceptable	0.387	0.206	0.340	0.345	0.421	0.291	0.265	0.409	0.392	0.473
17 Social Media	0.468	0.271	0.465	0.405	0.502	0.444	0.459	0.521	0.438	0.596
18 Expert Recommendation	0.435	0.291	0.368	0.413	0.358	0.325	0.352	0.416	0.523	0.395
19 Chinese Grape Region	0.478	0.277	0.460	0.400	0.416	0.556	0.438	0.545	0.514	0.464
20 Imported Luxury	0.490	0.279	0.435	0.462	0.488	0.366	0.392	0.494	0.461	0.498

Table 8. Correlation Matrix: Error Variances / Covariances

*Note*. Only the lower-triangular of the symmetric matrix is reported.

		Та	able 8 co	ontinued						
Item Title	11	12	13	14	15	16	17	18	19	20
1 Purchase Inquiry										
2 Style Assimilation										
3 Brand Trendiness										
4 Face Value										
5 Social Status										
6 Lucky Number in Price										
7 Han Taste										
8 Prosperous Health										
9 Social Currency										
10 High Culture										
11 Moutai Equivalent	$\delta_{1111}$									
12 Pairing Suggestion	0.433	$\delta_{1212}$								
13 Lucky Number in Vintage	0.537	0.378	$\delta_{1313}$							
14 Easily Recognized	0.525	0.378	0.502	$\delta_{1414}$						
15 Networking	0.414	0.384	0.370	0.397	$\delta_{1515}$					
16 Socially-acceptable	0.428	0.309	0.343	0.473	0.401	$\delta_{1616}$				
17 Social Media	0.548	0.409	0.480	0.577	0.345	0.437	$\delta_{1717}$			
18 Expert Recommendation	0.476	0.557	0.397	0.444	0.451	0.402	0.478	$\delta_{1818}$		
19 Chinese Grape Region	0.544	0.401	0.579	0.513	0.409	0.450	0.521	0.490	$\delta_{1919}$	
20 Imported Luxury	0.456	0.414	0.456	0.488	0.392	0.416	0.557	0.459	0.458	δ202

Table 8 continued

*Note*. Only the lower-triangular of the symmetric matrix is reported.

An examination was conducted of the partial correlations using two indices, the Kaiser-Meyer-Olkin Measure of Sampling (KMO) and Bartlett's Test. The KMO index compares the amplitude of the observed correlation coefficients to the amplitudes of the partial correlation coefficients. This model's KMO index was .956 and is considered strong (Brown, 2006; Tabachnick & Fidell, 2001). Bartlett's (1954) highly perceptive Test of Sphericity is a test of the hypothesis that the correlations in a correlation matrix are zero. This model's Bartlett's (1954) Test of Sphericity was highly significant (approximate  $\chi^2 = 3419.427$ ; df = 190; and p = .000).

*Eigenvalues* represent variance. Tabachnick and Fidell (2001) explain that the variance each standardized variable contributes to a principal factor extraction is one and a factor with an *eigenvalue* less than one is not as important—from a variance perspective—as an observed variable. Three factors displayed initial *eigenvalues* at or above one (see Table 9). The scree test of *eigenvalues* was plotted against factors (see Figure 2). The three factors, in descending order, are arranged along the abscissa with *eigenvalue* as the ordinate (Tabachnick & Fidell, 2001). The scree plot is negatively decreasing; the eigenvalue was highest for the first factor and moderate but decreasing for the next two factors before reaching small values for the last 17 factors.

Factor	In	itial Eigenva	lues		action Sums Loading	Rotation Sums of Squared Loadings <sup>a</sup>	
	Total Eigenvalue	% of Variance	Cumulative % of Variance	Total	% of Variance	Cumulative % of Variance	Total
1	9.2	45.9	45.9	8.7	43.4	43.4	7.9
2	1.2	5.8	51.7	0.7	3.4	46.8	6.4
3	1.0	5.1	56.8	0.5	2.6	49.4	6.2
4	0.9	4.7	61.5				
5	0.7	3.5	65.0				
6	0.7	3.4	68.4				
7	0.7	3.3	71.7				
8	0.6	3.0	74.7				
9	0.6	2.8	77.5				
10	0.6	2.8	80.3				
11	0.5	2.6	82.9				
12	0.5	2.5	85.4				
13	0.5	2.4	87.8				
14	0.4	2.1	89.8				
15	0.4	2.0	91.8				
16	0.4	2.0	93.8				
17	0.3	1.7	95.5				
18	0.3	1.6	97.1				
19	0.3	1.5	98.6				
20	0.3	1.4	100.0				

# Table 9. EFA Total Variance Explained

Note.

Extraction Method: Principal Axis Factoring.

<sup>a</sup> When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

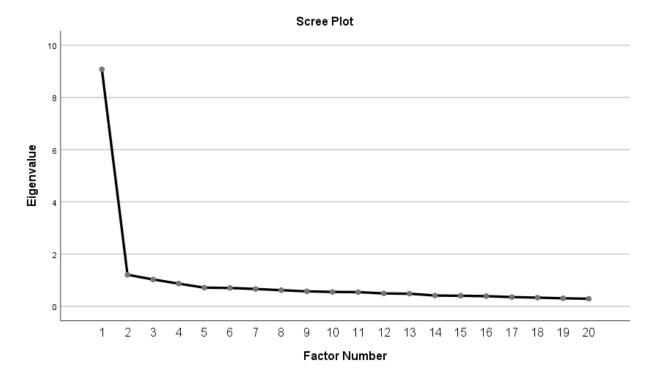


Figure 2. Scree Plot

A Principal Component Analysis (PCA) with then executed with an orthogonal rotation (Varimax). Using the Varimax rotation—under the assumption that the factors in the analysis were *uncorrelated*—the *communalities* chart was observed for values greater than .200; all communalities for this model were greater than .200. Factors less than .200 indicate that the items did not load properly on the factors. The *rotated factor matrix* table was interpreted for factor loadings—the higher the loading, the more the item is a pure measure of the factor (see Table 10). Comrey and Lee (1992) suggest that loadings in excess of: .710 (50% overlapping variance) are considered excellent, .630 (40% overlapping variance) are considered very good, .550 (30% overlapping variance) are considered good, .450 (20% overlapping variance) are considered fair, and .320 (10% overlapping variance) are considered poor.

Choice of the cutoff for size of loading to be interpreted is a matter of researcher preference; however, .300 was considered a minimum threshold, and research standard, and implemented for this model (Brown, 2006; Kahn, 2006; Tabachnick & Fidell, 2001).

Item Title	Factor 1	Factor 2	Factor 3
Purchase Inquiry	0.380	0.253	0.459
Style Assimilation	0.175	0.340	0.311
Brand Trendiness	0.500	0.367	0.249
Face Value	0.507	0.337	0.284
Social Status	0.609	0.291	0.235
Lucky Number in Price	0.245	0.747	0.182
Han Taste	0.255	0.556	0.192
Prosperous Health	0.459	0.440	0.294
Social Currency	0.314	0.338	0.526
High Culture	0.687	0.326	0.226
Moutai Equivalent	0.410	0.466	0.402
Pairing Suggestion	0.203	0.196	0.634
Luck Number in Vintage	0.340	0.662	0.249
Easily Recognized	0.638	0.274	0.311
Networking	0.307	0.183	0.483
Socially-acceptable	0.482	0.144	0.360
Social Media	0.554	0.341	0.343
Expert Recommendation	0.253	0.206	0.700
Chinese Grape Region	0.344	0.503	0.418
Imported Luxury	0.503	0.259	0.408

Table 10. Rotated Factor Matrix<sup>a</sup>

Note.

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 7 iterations.

Exploratory Factor Analysis (EFA) identified the model's three factors that measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese. The EFA, via SPSS, selected 20 items that explained each one of the three factors. The deductive sequence used to refine this study's model involved removing items that did not significantly

load on a factor (28), loaded on the incorrect factor (6), or cross-loaded on multiple factors (9). Nine items defined factor 1, six items defined factor 2, and five items defined factor 3 (see Table 11).

	. Item-to-Factor Grouping Items that Define the Factor
Tactor	
1	<ul> <li>When you purchase luxury wine, is it important that the wine's brand, or name brand, is famous and easily recognized?</li> <li>Do you agree that luxury wine reflects upon your social status or class level?</li> <li>How important is the influence of wine information in the media, including social media such as Sina- and Tencent-Weibo, WeChat, or Renren?</li> <li>Is it important that the wine represent a feeling for what is appropriate and socially-acceptable in culture?</li> <li>The wine you drink reflects your socially-constructed face value (miànzi), such as the title of a person, in a group setting.</li> <li>When you purchase luxury wine, how important is the brand's trendiness, acclaim, or popularity?</li> <li>Do you agree that selecting wine imported from a foreign country is important?</li> <li>Do you agree that wine fulfills a medicinal role in Traditional Chinese Medicine (TCM)?</li> </ul>
2	<ul> <li>Do you agree that a lucky number in the price of luxury wine is important? How important is a lucky number in the vintage (year bottled)? How important is it that luxury wine has a high sugar level (for example, the increased sweetness of Luzhou Laojiao baijiu, a Red Bull and vodka cocktail, or Huangjiu wine from Zhejiang)?</li> <li>When you purchase luxury wine, is a significant Chinese growing region (such as Ningxia, Shandong, or Xinjiang) important?</li> <li>Is it important that luxury wine's face value (miànzi) power is approximately equivalent to Moutai (acclaimed Chinese liquor)?</li> <li>Do you agree that sparkling wine, like champagne, is important in the world of wine?</li> </ul>
3	<ul> <li>How important is a recommendation by a sommelier or wine expert?</li> <li>How important is pairing or matching the wine with food?</li> <li>Do you believe that luxury wine reflects the exchange of strong personal favors in order to build good social currency (rénqíng)?</li> <li>Do you believe that wine has the ability to create friendly relationships and develop personal bonds in order to build good networking (guanxi)?</li> <li>Do you agree that your luxury wine purchase is influenced by a celebration or meaningful occasion?</li> </ul>

# Table 11. Item-to-Factor Grouping

The EFA factor structure matrix exposed purely positive item loadings under factors 1 and 3 and purely negative item loadings under factor 2 (see Table 12). The positive and negative relationship was further refined through factor correlations. The EFA correlation matrix supported the structure matrix in that it revealed a positive correlation between factors 1 and 3 (see Table 13). Factor 2 is negatively correlated to both factors 1 and 3.

Item Title	Factor 1	Factor 2	Factor 3
High Culture	0.789	-0.579	0.502
Easily Recognized	0.760	-0.537	0.552
Social Media	0.728	-0.579	0.572
Social Status	0.713	-0.523	0.477
Imported Luxury	0.678	-0.505	0.595
Moutai Equivalent	0.676	-0.661	0.612
Prosperous Health	0.666	-0.625	0.522
Face Value	0.663	-0.545	0.502
Brand Trendiness	0.655	-0.561	0.475
Socially-acceptable	0.599	-0.381	0.516
Lucky Number in Price	0.559	-0.807	0.428
Luck Number in Vintage	0.632	-0.777	0.498
Chinese Grape Region	0.640	-0.677	0.615
Han Taste	0.499	-0.639	0.393
Style Assimilation	0.395	-0.446	0.424
Expert Recommendation	0.559	-0.449	0.771
Pairing Suggestion	0.488	-0.407	0.693
Social Currency	0.594	-0.545	0.664
Purchase Inquiry	0.593	-0.473	0.603
Networking	0.513	-0.390	0.584

Table 12. EFA Structure Matrix

Note.

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

	Factor 1	Factor 2	Factor 3
Factor 1	1.000		
Factor 2	-0.717	1.000	
Factor 3	0.708	-0.562	1.000
Note.			

Table 13. EFA Factor Correlation Matrix

Extraction Method: Principal Axis Factoring; Rotation Method: Oblimin with Kaiser Normalization.

The results of the Exploratory Factor Analysis (EFA) and the strength of their loadings directly addressed the completion of Part 1, which was to empirically develop and statistically analyze, through model development literature and an EFA, a new model. It also addressed research question number one, which identified the culture-based items that measured the motivation to consume luxury wine by business travelers that identify as culturally-Chinese. The items (listed using titles from highest to lowest EFA factor loading [greater than or equal to .300]) were High Culture (.844), Easily Recognized (.754), Expert Recommendation (.751), Social Status (.732), Pairing Suggestion (.693), Social Media (.579), Socially-acceptable (.546), Face Value (.530), Brand Trendiness (.520), Imported Luxury (.508), Social Currency (.467), Networking (.443), Prosperous Health (.405), Purchase Inquiry (.360), Style Assimilation (-.306), Moutai Equivalent (-.337), Chinese Grape Region (-.418), Han Taste (-.576), Luck Number in Vintage (-.664), and Lucky Number in Price (-.838).

#### 4.2.3 Model Fit Results and Internal Consistency of Factors

Part 2 of this study was to validate the new model using Confirmatory Factor Analysis (CFA). Cronbach's coefficient alpha (Cronbach's  $\alpha$ ) is a measure of internal consistency; it determines how closely related a set of items are to a group. It is also considered to be a measure of scale reliability. Whereas a Cronbach's  $\alpha$  equal to 0.66 is low and the factor may be considered to be unreliable or not internally consistent, Cronbach's alphas ( $\alpha$ ) of this model's factors were high: factor 1 was .895, factor 2 was .840, and factor 3 was .802 (Bernstein & Nunnally, 1994). When the Cronbach's alpha if alpha deleted column was reviewed, the removal of one item would have increased a factor's alpha. If the item titled Style Assimilation

was removed from factor 2, then the Factor's Cronbach's  $\alpha$  would increase .007. For example, given the reliability of factor 2's Cronbach's  $\alpha$  overall, allowing the item titled *Style Assimilation* to remain in the set more clearly defined the essence, definition, and explanation of the overall factor. Furthermore, removal of *Style Assimilation* would have resulted in four cross loadings, changed the variance order of factors 2 and 3, and modified all items' loading strengths. Therefore, given the overall reliability and internal consistency of the model, the removal of items was deemed unnecessary.

The maximum likelihood parameter values, also called *estimates* of the standard errors, provided approximate information regarding the significance of each estimated parameter. LUXECULTR's 43 *estimates* consisted of "lambda-x" or items-to-factor (18 *estimates*), "phi" or factor-to-factor (7 *estimates*), and "theta-delta" or item-to-item error (18 *estimates*). The ideal value for all *estimates* is above 1.96 for 2-tailed, significance less than 0.05 (Tabachnick & Fidell, 2001). Each of the 43 *estimates* in LUXECULTR were between 8.291 and 14.553; this means all items were significant and loaded on their respective factors as assumed.

### 4.2.4 Confirmatory Factor Analysis (CFA) Model

Several factor deduction models were produced through SPSS and the most appropriate model was selected. A correlation matrix was produced, descriptive statistics were tabled, the LISREL 9.2 (LISREL) syntax was written for the model and uploaded into LISREL for analysis. The fit and adequacy of the model were interpreted, and model modification was calculated to potentially improve fit and adequacy.

An oblique rotation was conducted to obtain a simple structure—as an assumption that the factors were *correlated*. The Pattern Matrix was interpreted (using an oblique rotation) to identify the individual items (according to their loadings) that explained the major three factors; in other words, three groups of items were identified to explain each of the three major factors (see Table 14).

Table 14. E	FA Patterr	n Matrix <sup>a</sup>	
	Factors		
	Social	Cultural	Expert
Item Titled	Prestige	Pride	Credibility
High Culture	0.844		
Easily Recognized	0.754		
Social Status	0.732		
Social Media	0.579		
Socially-acceptable	0.546		
Face Value	0.530		
Brand Trendiness	0.520		
Imported Luxury	0.508		
Prosperous Health	0.405		
Lucky Number in Price		-0.838	
Lucky Number in		-0.664	
Vintage			
Han Taste		-0.576	
Chinese Grape Region		-0.418	
Moutai Equivalent		-0.337	
Style Assimilation		-0.306	
Expert Recommendation			0.751
Pairing Suggestion			0.693
Social Currency			0.467
Networking			0.443
Purchase Inquiry			0.360

Note.

Extraction Method: Principal Axis Factoring; Rotation Method: Oblimin with Kaiser Normalization.

<sup>a</sup> Rotation converged in 13 iterations.

LUXECULTR was identified (see Table 15) and drawn (see Figure 3) by the deletion of items, one at a time, recalculated, and reanalyzed until the simple structure was achieved.

		Factors	
	Social Cultural		Expert
	Prestige	Pride $(\alpha = 0.840)$	Credibility $(\alpha = 0.802)$
	$(\alpha = 0.895)$		
30. Is it important that you purchase the wine consume	ed		
by high culture, such as celebrities and the social	0.877		
elite?			
42. When you purchase luxury wine, is it important th	at		
the wine's brand, or name brand, is famous and	0.879		
easily recognized?			
63. Do you agree that luxury wine reflects upon your			
social status or class level?	0.881 vel?		
51. How important is the influence of wine informatio	n		
in the media, including social media such as Sina-	0.880		
and Tencent-Weibo, WeChat, or Renren?			
32. Is it important that the wine represent a feeling for			
what is appropriate and socially-acceptable in	0.891		
culture?			
8. The wine you drink reflects your socially-constructed	ed		
face value (miànzi), such as the title of a person, ir	na 0.885		
group setting.			
6. When you purchase luxury wine, how important is	s 0.886		
the brand's trendiness, acclaim, or popularity?			
62. Do you agree that selecting wine imported from a	0.004		
foreign country is important?	0.884		
22. Do you agree that wine fulfills a medicinal role in	0.004		
Traditional Chinese Medicine (TCM)?	0.884		

Table 15. LUXECULTR Items and Three-Factor Structure

Table 15 continued		
12. Do you agree that a lucky number in the price of	0.797	
luxury wine is important?	0.797	
38. How important is a lucky number in the vintage	0.795	
(year bottled)?	0.795	
18. How important is it that luxury wine has a high sugar		
level (for example, the increased sweetness of	0.821	
Luzhou Laojiao baijiu, a Red Bull and vodka	0.821	
cocktail, or Huangjiu wine from Zhejiang)?		
57. When you purchase luxury wine, is a significant		
Chinese growing region (such as Ningxia, Shandong,	0.809	
or Xinjiang) important?		
31. Is it important that luxury wine's face value (miànzi)		
power is approximately equivalent to Moutai	0.809	
(acclaimed Chinese liquor)?		
10. Do you agree that sparkling wine, like champagne, is	0.847	
important in the world of wine?	0.047	
53. How important is a recommendation by a sommelier		
or wine expert?		0.742
37. How important is pairing or matching the wine with		
food?		0.761
26. Do you believe that luxury wine reflects the		
exchange of strong personal favors in order to build		
good social currency (rénqíng)?		0.758
43. Do you believe that wine has the ability to create		
friendly relationships and develop personal bonds in		
order to build good networking (guanxi)?		0.782
60. Do you agree that your luxury wine purchase is		
influenced by a celebration or meaningful occasion?		0.775

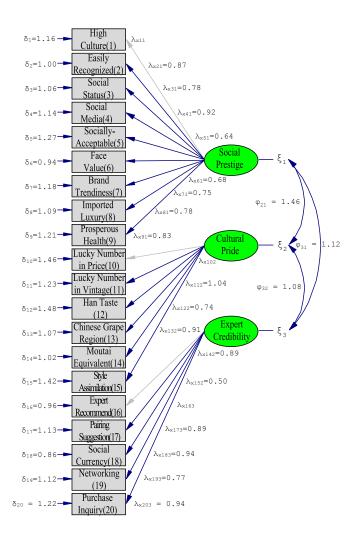


Figure 3. CFA LUXECULTR Model with Factor Loadings, Factor Variances, and Error Variances

The next CFA step was to evaluate the chi-square. Chi-square ( $\chi^2$ ) indicates the difference between expected and observed covariance matrices; values closer to zero demonstrate a better fit or smaller differences between observed and expected covariance matrices (Hair, 2010). LUXECULTR's maximum likelihood ratio chi-square of 343.627 (p = .000) was divided by the 167 degrees of freedom (the number of non-redundant elements of the covariance matrix minus the number of free parameters) and resulted in an excellent fit measurement of 2.06, well below the ideal threshold of 3.00 (Hatcher, 1994).

Following CFA processes delineated by Brown (2006), indices were observed to evaluate the overall fit: *Goodness of Fit (GFI)*, [*Non*] *Normed-Fit Index (NNFI)* also called the *Tucker Lewis Index (TLI)*, *Incremental Fit Index (IFI)* also called  $R^2$ , and *Comparative Fit Index (CFI)*. A further observation was made for the *Root Mean Square Error of Approximation (RMSEA)*.

The GFI is the proportion of variance accounted for by the estimated population covariance. LUXECULTR's GFI was .91 and near the ideal value of .95 (Brown, 2006; Hooper, Coughlan, & Mullen, 2008; Kline, 2015). An NNFI of .95 indicates the LUXECULTR's improved the fit by 95% relative to an independent null model. NNFI is preferable for smaller samples. LUXECULTR's NNFI was .94 and near the ideal value of .95 (Brown, 2006; Byrne, 2013; Hammer, Bennett, & Wiseman, 2003). The *IFI* is analogous to  $R^2$  and so a value of zero indicates the worst possible model, a value of one indicates having the best possible (Brown, 2006; Byrne, 2013; Hammer, Bennett, & Wiseman, 2003). LUXECULTR's IFI was .95. The CFI is a revised form of NFI and is not very sensitive to sample size. The CFI compares the fit of a target model to the fit of an independent, or null, model. LUXECULTR's CFI was .95 and at the ideal threshold of .95 (Brown, 2006; Byrne, 2013; Hammer, Bennett, & Wiseman, 2003). One other value was observed for further fit; the RMSEA is a parsimony-adjusted index. LUXECULTR's *RMSEA* was .055, closer to zero represents a good fit (Brown, 2006; Byrne, 2013; Hammer, Bennett, & Wiseman, 2003). Due to the overall excellent fit of LUXECULTR, further modification was not undertaken given the modification index (MI) of 22.67. The MI is an estimated value in which the model's  $\chi^2$  test statistic would decrease if a fixed parameter was added to the model and freely estimated (Brown, 2006).

The key indices were determined to evaluate the overall fit of the model and confirm reliability. The results demonstrated the degree to which LUXECULTR produced internal consistency across measures and addressed research question number 3: *What is the evidence of* <u>reliability for LUXECULTR that measures the motivation to consume luxury wine by business</u> travelers that identify as culturally-Chinese?

The results of the Confirmatory Factor Analysis (CFA) directly addressed Part 2, to validate the new model using CFA. The results also addressed research question number two, which was to identify the culture-based factors that measured the motivation to consume luxury wine by business travelers that identify as culturally-Chinese. The following factors (listed

according to their respective Cronbach's  $\alpha$  value) were Social Prestige ( $\alpha$  = .895), Cultural Pride ( $\alpha$  = .840), and Expert Credibility ( $\alpha$  = .802).

#### 4.3 Summary of Findings

The purpose of this study was to develop a new model that measures the motivators to consume luxury wine by business travelers that culturally-identify as Chinese. The underlying scale, item, and factor development relied on interdisciplinary and industry-specific literature resulting in a model with excellent fit. Revisions were made to the model based on the feedback from 11 expert consultations and a focus group to enhance content, face, and ecological validity. An EFA was conducted to examine the dimensionality of the revised set of items and factor loadings were examined using a CFA to create a parsimonious representation of the item sets. The results of the EFA demonstrated factor validity of the revised items. LUXECULTR's development underwent eight stages, from initial item generation to final validation of the items and factors through reliability tests.

### **CHAPTER 5. DISCUSSION, IMPLICATIONS, AND CONCLUSION**

This chapter summarizes the conclusions of the study and presents implications and recommendations for future research. The purpose of this study was twofold: Part 1, to empirically develop and statistically analyze, through model development literature and an Exploratory Factor Analysis (EFA), a new model (LUXECULTR) that measures the culture-based motivators to consume luxury wine by business travelers that identify as culturally-Chinese; and Part 2, to validate LUXECULTR using Confirmatory Factor Analysis (CFA). The research questions that guided this study were to identify the underlying items and factors of a new model, then validate the new model called LUXECULTR. The research questions further proposed to assess theoretical and empirical validity of all scales and to measure reliability indices.

This chapter is organized into three sections, the findings are briefly summarized then discussed in the first section. The second section reviews the implications of the findings and the final section states the limitations of the study and future research.

### **5.1 Discussion of Findings**

A review of literature revealed a rich history of model, scale, item, factor development to fulfill the need for a new culture-based model that measured luxury wine consumption. There was a need for a new model for researchers that assessed the psychological, culture-based motivators to consume luxury wine that also provided results for researchers and industry stakeholders. A content analysis of interdisciplinary and hospitality and tourism management literature revealed the related items behind three major aspects of luxury wine consumption—purchasing, tasting, and presenting—by business travelers that identify as culturally-Chinese.

Once the key items were extrapolated, the three factors of LUXECULTR were validated. The content, or items, for each type of consumption was deduced and items were generated to gather data. Research design principles were implemented in generating an inventory of items to measure each aspect; hence, 63 original items were prepared to entirely explain luxury wine consumption. To develop an instrument that demonstrated evidence of validity and reliability, it was crucial to follow procedures of expert validation. Numerous stages of feedback and revisions improved clarity of the items, necessary to achieve high model reliability. Representatives of the sample performed continuous face validity to refine the theoretical representation. Thus, through employing validity measures of both experts and representatives of the sample population, the model demonstrated high reliability and content, face, and construct validity.

Principal axis factoring and Oblimin rotations were conducted through Exploratory Factor Analysis (EFA). Based on factor loadings of items, those correlation values between items in the model, items that did not satisfactorily measure the factor were deleted. Literaturebased ideal ratios were used to determine necessary subject responses per item and items necessary per factor corresponding to the factors of LUXECULTR. Therefore, the EFA supported empirical validity for a three-factor structure of a 20-item model. Reliability coefficients, specifically Cronbach's alpha, exceeded 0.800 for all factors offering evidence of high reliability.

Subsequently, Confirmatory Factor Analysis (CFA) was conducted to validate the threefactor model suggested by the EFA results. The CFA results demonstrated higher item-to-factor loadings and no change in factor quantity, fully supporting the initial, theorized EFA model. Factor 2 was negatively correlated to both factors 1 and 3 in the EFA model (see Table 16); furthermore, all items under factor 2 were negative (see Table 14). This is interpreted as a strong correlation between all three factors, regardless of the negative correlations. Observation of the EFA correlation matrix confirmed that the inter-item correlations are strong—above .300—supporting high inter-factor correlations (see Table 8). The EFA's high inter-factor correlations are confirmed by the CFA, supporting a strong theoretical fit. Thus, the findings of this study provide theoretical and empirical support for LUXECULTR through evidence of face, content, and construct validity and reliability reflecting its foundational conceptualization.

The first-order CFA results were a major focus of this study; yet, there was one noteworthy finding: the presence of one, second-order factor. The second-order CFA is a statistical method employed to confirm that the theorized factor in a study loads onto a certain number of underlying sub-factors (Marsh & Hocevar, 1985). This finding is exposed through factor correlations.

The initial EFA factor correlation results demonstrated a strong, positive relationship between Social Prestige and Expert Credibility (.708); consumers rely on external influences to motivate their consumption (see Table 16). Cultural Pride, however, was negatively correlated to the other two factors (-.717 and -.562); consumers relied on internal preferences to motivate their consumption.

Table 16. EFA Factor Correlation Matrix1231Social Prestige1.0002Cultural Pride-0.7171.0003Expert Credibility0.708-0.5621.000

On the other hand, the CFA standardized factor correlation matrix identified a strong, positive correlation supporting convergent validity between all three factors indicated by the first-order loadings (.882, .851, and .827) (see Table 17). The factors united explain one larger, over-arching, culture-based factor that may explain a more complex culture-based motivator.

Table 17. CFA Completely Standardized Factor Correlation Matrix

	1	2	3
1 Social Prestige	1.000		
2 Cultural Pride	0.882	1.000	
3 Expert Credibility	0.851	0.827	1.000

### 5.1.1 Factors Defined

The first factor, titled Social Prestige, was defined as using reputation to increase social prominence. Luxury wine attributes, especially of an acclaimed product from a foreign country, must be easily recognizable, famous, and trendy so its consumption may serve as a medium to reflect social status. Luxury wine consumption not only satisfies national wine health promotions but fulfills a historically-medicinal role—such as its ability to align with the principles of Traditional Chinese Medicine—and embodies a feeling for what is appropriate and socially-acceptable in high [Chinese] culture. Luxury wine purchases must influence, and incrementally

increase, one's socially-constructed face value; if the product information across social media channels promotes the popularity and of the product, then adoption of the product will directly and positively influence one's class level.

The second factor, titled Cultural Pride, was defined as the embodiment of the singular Chinese culture. The socially-constructed importance of lucky numbers, reflected in the price or vintage of a luxury wine, portray a Chinese ideology that intangible external attributes, such as luck, growth, and prosperity, may be internalized when the wine is consumed. Consuming wine with a higher sugar content is indicative of classic Chinese culture-based preferences; therefore, consuming a wine with higher sugar content is linked to overall Chinese style preference, not an individual preference that may veer from the norm. Culturally-linked heritage preferences are also displayed by placing importance on wine from significant Chinese wine-producing regions, instead of consuming foreign-produced wine. Moutai, for instance, is an acclaimed—and wellknown—Chinese liquor that increases the consumer's face value (Caifen, 2009). The passion to consume luxury wine with the same high face value of Moutai exhibits cultural pride.

When in doubt about which luxury wine to consume, the consumer may measure the luxury wine against other Chinese products with high-cultural value, such as Moutai. Relying on one's native-born culture to motivate consumption is also demonstrated in a new wine style preference: sparkling wine, more specifically Champagne. Although China has historically consumed still red wine due to the meaning behind its color and moreover, price, the contemporary trend to consume Champagne is assimilated into the *New Chinese Consumer's* consumption culture. The cost for a bottle of luxury Champagne is often equal to a bottle of still red wine. Moreover, the ability of Champagne to increase face value, for instance, to a similar degree as Bordeaux red wine, is an attribute that explains (supports) cultural pride. Similarly, Champagne may find equity in face value with Moutai. Hence, the consumer employs a success factor, such as assimilation, to incorporate Champagne into the culture purely based on Champagne's ability to increase face value.

The third factor, titled Expert Credibility, was defined as a reliance on another's expert knowledge in the immediate business environment. Reliance on expert opinions and motivation to consume luxury wine is heavily influenced by the opinion from an expert within the business environment. Due to the need for further wine knowledge in China, insecurity may lead the consumer feel unsure of personal wine knowledge in the business environment where networking, face value, and social currency are at stake. Thus, the consumer may abdicate, or allocate, some degree of decision-making to experts. For example, the consumer bases the motivation to consume luxury wine, even food-to-wine pairing choices, upon suggestions by the sommelier, wine steward, or wine expert. The suggestions must compliment rénqíng, the exchange of personal favors in order to build good social business currency. The suggestions must also compliment networking, the ability to create friendly relationships and develop personal bonds in order to build good business networking. Finally, relying on another's expert perspective is meant to increase the meaningfulness of the occasion or celebration for which the wine was intended.

## **5.2 Research and Practical Implications**

This study achieved the following: development of a new model to understand which culture-based items measure the motivators to consume luxury wine by business travelers that identify as culturally-Chinese, development of a model to understand which culture-based factors measure the motivation to consume luxury wine by business travelers that identify as culturally-Chinese, validation of the new model and its three factors, and model development and validation for the new model. The implications to first, research and second, practice are specified.

The concept of luxury wine consumption by aspirational cultures—the socially- and economically-ascending next generation of consumers from global cultures and nations (such as luxury wine consumers from India and Brazil)—has evolved over the last few decades with many conceptualizations and interpretations. Three of the strongest theoretical concepts that ground culture-based luxury wine consumption are self-identity, social-identity, and intercultural sensitivity. These concepts have distinct theoretical bases; they have evolved separately but are closely related within the context and are used as guides for this study. The study and model were able to specify striking similarities that lay founded in their meaning, such as determination of a set of luxury wine items to establish self- and social-identity in a culture or community. The identification of a specific set of items, when used to measure a consumer's social prestige, may define that consumer's ego as an individual and within the confines of a society that prides recognition.

The common themes, identified in the items from the EFA, integrate three factors: Social Prestige, Cultural Pride, and Expert Credibility. The *New Chinese Consumer*, for instance, feeds on social status. That is, if the individual consumed the same products as members of high culture, those that are easily recognizable and socially-acceptable like acclaimed foreign products, then the ability to measure and potentially change the individual's social status could be more easily achieved. Oppositely, placing preference on product attributes such as environmentally-friendliness, role in tourism, and counterfeit would not contribute to increasing social status.

Members of *The Chinese Phenomenon* take pride in their culture. Their pride may be measured positively by consuming a luxury product with high face value, such as Moutai, or another that displays a culturally-distinct number in its price (numbers such as two and eight). An individual's cultural pride would not be measured well if preference for luxury products was determined by weak attributes, for example, information about the product on a shelf or an unlucky number in the its price. Socially-acceptable luxury product choices could be positively confirmed if the individual relied on advice from experts who are familiar and well-educated about the luxury product. In contrast, relying only on the advice of family or friends, for example, may not increase or change the *New Chinese Consumer's* face value. Integrating the aforementioned factors into one example may explain an over-arching, culture-based attribute.

If a business traveler that identifies as culturally-Chinese wanted to prospectively increase her business face value, then she could adorn her wrist with a Cartier bracelet, her arm with a Louis Vuitton handbag, all while asking the sommelier at The Ritz Carlton Shanghai's Scena restaurant which Château Margaux is best, the 1988 or 2008. She should project her assumed status without stepping beyond the social rules of her culture. Conversely, she would neither improve her social currency nor her business network if she kept her Mont Blanc pen out of sight in her Bloomingdale's clutch, carried a Starbuck's coffee into Scena (fine dining lounge), and asked for a domestic 2004 vintage bottle of Château Rongzi Yellow Label Cabernet Sauvignon from Shanxi province.

An integrated, unified framework where Social Prestige, Cultural Pride, and Expert Credibility are used to measure the motivators to consume luxury products is a benefit to both stakeholders and the business traveler that identifies as culturally-Chinese, moreover, contributing to a better understanding of *The Chinese Phenomenon*. This framework thrives on understated cultural values, such as projection confined by protection and ambition confined by regimentation. The new model also brought forth a balance between the luxury wine consumer's dependence on personal cultural mores, societal influencers, and expert opinions. Although the suggestion of society and self are implied in the theoretical elaboration of identity and sensitivity, the implications have not been thoroughly explored.

The results of this study highlighted the parallel between self, society, and culture. It may be posited that the subject's, the business traveler that identifies as culturally-Chinese's, strongest identity was partially scaffolded by external sources. The reliance on personal cultural values to define self-identity was second to the desire to acquire societal recognition by mimicking consumption habits of high culture and the social elite in China. Finally, the subject continued to self-identify within society by means of external resources—through suggestions and advice of experts—to achieve larger-than-life social connections and interdependency in the business environment.

The intent of developing and validating LUXECULTR was so that the resulting developmental process might be adopted by other researchers who wish to explore the psychological, culture-based motivators to consume luxury products by those that identify as culturally-Chinese, including, but not limited to, wine. With a clearer understanding of the various wine preferences that motivate consumption, there is now a new opportunity to increase wine research in areas that are both underexplored and beneficial to research and practice. The development and validation of LUXECULTR provides an opportunity for further validation of the instrument. It is recommended to test for convergent validity with other scales from culture-based wine research domains such as cross-cultural and cross-national choice attributes (Lockshin, 2013); retail marketing for emerging premium and luxury markets (Lockshin, Corsi, Cohen, Lee, & Williamson, 2017; Thach & Olsen, 2004); on- and off-premise consumer behavior and experience (Drennan, Bianchi, Cacho-Elizondo, Louriero, Guibert, & Proud, 2015; Sáenz-Navajas, Ballester, Pêcher, Peyron, & Valentin, 2013); and wine attitude, convictions, and beliefs (Carr, Shin, Severt, & Lewis, 2017).

LUXECULTR is an elevated scale and considered a model. With the development of a new scale following rigorous development procedures scaffolded by a meticulous and thorough review of literature and theory, LUXECULTR transcends from scale to model. The evidence of

high internal validity and consistency of LUXECULTR make it possible to study the consequences and antecedents of LUXECULTR to provide new perspectives in the topic of luxury wine consumption by those that identify as culturally-Chinese. Further studies analyzing variances in perceptions due to demographic differences such as personal wine knowledge rating, style preference, and vessel in which to present the wine, could help strengthen the understanding of motivators to consume by those that identify as culturally-Chinese. The most significant contribution to research is the outlined procedure—from item generation to validity and reliability testing—to develop this study's model that may be adopted by researchers to examine those that identify as culturally-Chinese. Other contributions include practical implications.

The LUXECULTR is a practical tool to measure Chinese people, culture-based wine consumption and may be used as a precursor for wine stakeholder development and change. Luxury wine stakeholders that may be positively affected by this study include wholesalers, retailers, and distributors; marketers and strategists; business travelers; Meeting, Incentive, Conference, and Event (MICE) organizers; and hospitality managers and entrepreneurs. Global luxury wine stakeholders and suppliers meet, yet often fall short of, of demand. With the increasing prevalence of global luxury wine sales, more wine stakeholders need practical solutions and tools to create effective promotional strategies and streamline luxury wine supply.

LUXECULTR's framework offers stakeholders culture-based knowledge to help meet, or transcend, their Chinese people consumers' luxury wine purchasing, tasting, and presenting needs. It will allow them to implement a more holistic approach to wine preference behavior and make available specific choices that not only meet but surpass their consumers' needs. An analysis of the culture behind the luxury wine industry can help provide recommendations for adaption and development initiatives that will induce a more attentive culture for those that consume luxury wine. Stakeholders acknowledge the steep costs of static inventory and short supply—LUXECULTR could present an opportunity for increased sales and consumer satisfaction synergies, for instance, in other luxury good fields.

Hermes luxury fashion products could, for instance, increase sales through a merger with Starbucks and Häagen-Dazs. The Hermes storefront could integrate a Starbucks shop into its showroom that features Häagen-Dazs brand products. The consumers would be afforded the opportunity to be seen drinking luxury coffee and eating luxury ice cream outside of their home, in public view, while shopping for luxury fashion. Another example of the prospective application of LUXECULTR could be found in a winery in a prominent grape-growing region in China, such as Shandong Province.

Château Changyu in Shandong province is styled after a French château. The *New Chinese Consumer* is thirsty for wine experiences both as a means to be seen and project in public and to improve wine knowledge. Expert educators would teach best consumption practices in the tasting room that sells both domestic and famous international selections; a Hermes wine tote could be released for purchase with every five cases of wine ordered.

The finding of this study may heighten awareness for the need and possibility for cultural sensitivity and change. Poignant moments for such change occur when an entrepreneurial wine venue begins to expand, when a new leader is hired, or when wine wholesalers, distributors, or retailers merge. These moments are the perfect opportunity to establish change through an understanding of consumer needs, values, and motivations derived from using LUXECULTR as a framework to implement change and recognize needs. The following proposes a more detailed future application of the present study.

Stakeholders, such as wine shop retail managers that market to luxury wine consumers that identify as culturally-Chinese, must optimize their inventory for efficacy. Based on over twenty years of industry experience, it has been noted that these individuals usually report cases of high static wine inventory, that is, selections that are not sold for a year or more and are thus not easily liquidated. Hospitality wine managers with expansive wine lists often have luxury wine inventories with low inventory turnover ratios, which effectively reduce their return on investment. Literature fails to supply managers with the tools to enable them to evaluate and modify inventory selections, inventory levels, and pricing to improve the returns from the inventory investment. Furthermore, there is a trade-off between inventory investment and offering luxury wines that signal prestige and status against margins earned, replenishment options, and inventory investment. To meet the practical needs of stakeholders and Chinese people consumers in the industry, the LUXECULTRSTAT (statistic). Yield management looks beyond daily, weekly, and seasonal measuring tools (such as ADR and RevPAR in the lodging industry) to increase profitability from existing inventory. Luxury wine-based yield management

statistics are needed when sales can be made in advance (when variable costs are low) and supply is fixed and limited.

The LUXECULTRSTAT would implement the LUXECULTR model for stakeholder benefit. LUXECULTRSTAT is envisioned as an electronic application that relies on a series of inventory question responses from the stakeholder to create a report. When integrated by stakeholders and made accessible by consumers, it may provide luxury wine consumers of varying wine knowledge, levels in interactivity, and budgets with personalized wine experiences that support their consumption needs. Personalized, immediate experience needs include the ability to share information about wine via social media and recommendations based upon their location and preferences. LUXECULTRSTAT would fill the need to share information by industry stakeholders from wineries to consumers; it would also provide a low cost and effective marketing and promotions channel for small producers with high-end wine offerings that raises awareness, luxury selection accessibility, and encourages luxury wine consumers to build a more individual-based list of preferences from the standardized, culture-based group of wine preferences. LUXECULTRSTAT would be hosted in a technology-based platform that provides valuable data for the luxury wine industry to evaluate and use to make strategic decisions.

Most stakeholders are highly focused on income statement line items—for example sales, costs, and profit—but they may often ignore balance sheet items like inventory. Additionally, they may often focus on increasing stock turnover (sales divided by average inventory) and sacrifice reducing gross margin ratio (gross margin divided by sales). Therefore, by limiting or streamlining inventory to entail only selections that exhibit appealing wine preferences, stakeholders may both increase stock turnover and gross margin. The over-arching impact of LUXECULTRSTAT would be inventory optimization through a series of stages.

The first stage would involve the proper inspection and cataloguing of a stakeholder's inventory. An industry inventory tracking system should be employed to reconcile all wine selections. Fine wine experts should be consulted to revalue and appraise the inventory due to the sensitive nature behind vintage, style, and brand. The most recent inventory turnover ratio must be determined by dividing the cost of goods sold by average inventory across the last six months. The mark-up ratio—a key factor to properly and efficiently pricing wine—must be determined by dividing the cost of goods sold. Then, volume efficiency choices must be executed.

The second stage for increasing financial profitability (such as the return on assets or return on investments) would utilize LUXECULTR as an initial guide to reduce the current inventory of those selections that do not possess appealing preferences by those that identify as culturally-Chinese. Wines that would merit removal for selling include those that are not consumed by global elite and high-culture individuals from China, are not easily recognized or trending, fail to be promoted on social media, or are not produced in significant wine-producing regions. Furthermore, wines may be considered for removal from sale if they are not from a vintage that possesses a lucky number, do not appeal to the taste or flavor profile of the Chinese luxury wine consumer, or are not contemporary styles assimilated into the Chinese luxury wine culture. Finally, wines may be considered for removal for selling if they are not recommended by an expert, do not enhance social currency for business networking, and are not acceptable purchases for a specific occasion.

The third stage involves the inputting of data. When the stakeholder enters data into the LUXECULTRSTAT system, the results would provide ratios and terminology that is familiar to mangers, and therefore it will be straightforward to implement, understand, and analyze. LUXECULTRSTAT would create visual representations of the relationship between each wine selection according to LUXECULTR's three factors and sales performance. The statistic would identify wines that warrant attention, such as those considered "sell-now" brands, varietals, or vintages. These selections may be sold online. Third party sales by entities such as Vinfolio, VinCellar, and CellarTracker are user-friendly mediums for selling luxury wine; concurrently they gather and track changing consumer preferences.

CellarTracker and WineScan manage retail, wholesale, and private wine inventories while simultaneously tracking consumer preferences. They use bar code scanning technology in common mobile phones to capture, store, and share information, thereby providing stakeholderlimited [discrete] accessibility when needed. For example, CellarTracker and WineScan are able to geo-locate luxury wine selections with consumer-based preference in local shops and restaurants. The applications also aggregate consumer preference and purchasing behavior information. Importantly, this information is not only matched to critic notes and awards from acclaimed personalities or entities—such as Robert Parker, Wine Spectator, Steven Tanzer, Burghound, Jancis Robinson, and Vintage Tastings—but it also provides the stakeholders with individual consumer preferences. Once the inventory has been reduced, LUXECULTRSTAT may be used to guide the acquisition of high-velocity luxury wine inventory selections that possess wine preferences appealing to consumers that identify as culturally-Chinese.

When these processes, or stages, are initiated, inventory performance may be measured continuously by LUXECULTRSTAT using sales, cost of goods sold, and average inventory of a specific period. According to LUXECULTR, luxury wines with appealing preferences can be identified in groups by LUXECULTRSTAT to prospectively refine inventory engineering as follows:

- Market Favorites: these wines are globally-recognized, well-known to business travelers that identify as culturally-Chinese; they meet item preferences of LUXECULTR's Social Prestige, Cultural Pride, and Expert Credibility factors; and they include labels such as Château Petrus, Château Lafite, and Château Margaux;
- Rockstar Performers: these wines are historically popular; they meet item preferences of LUXECULTR; they are vetted to become market favorites; and they include labels such as Richebourg, Chambertin, Caymus, Romanée-Conti, Opus One, Musigny, Penfolds, Henschke, Tignanello, and Sassicaia; and
- Change opportunities: these wines are market favorites that have recently fallen-out of popularity due to decreased promotions; they meet item preferences of LUXECULTR; they are vetted to become market favorites; and they include labels such as Alexander Valley, Joseph Phelps, Franciacorta, Crystal, Caymus, Torbreck, Dom Perignon, La Grande Dame, Château D'Yquem, Tokaji, Inniskillin, and Trockenbeerenauslese.

Managers can improve LUXECULTRSTAT's value for a specific luxury wine selection by employing alternative modes for reducing inventory or by modifying mark-up. Whereas an individual may offer useful feedback about the utility of this analytical yield management method, the results from a pilot test involving a number of stakeholders is an opportunity for future research. LUXECULTRSTAT's benefits would include the ability to predict luxury wine demand consumption frequency to streamline replenishment ordering needs and increase profitability. Inventory stockouts could be avoided, thereby limiting the need to backorder or to offer a substitution. The statistic would optimize inventory to generate more sales on less inventory, which in turn would yield a higher inventory turn. Simultaneously, the statistic would provide the stakeholder with the ability to gather information, acquire and implement crosscultural competence, and remain knowledgeable of the most important motivators to consume luxury wine by members of *The Chinese Phenomenon* and business travelers that identify as culturally-Chinese.

## **5.3 Limitations and Future Research**

The instrument's refined 20 items were not administered to evaluate convergent validity for the 20-item structure. Decisions for retaining the 20 items were made balancing judgmental item qualities with internal item qualities (Stanton, Sinar, Balzer, & Smith, 2002); thus, the reliability factor structure of the 20 item instrument is most applicable if validated with a new culture-based sample that identifies as culturally-Chinese. Discriminant validity is an element of construct validity, observed by examining low correlations of a factor to those of an unrelated factor. Other factors were not measured in this study, so discriminant validity for LUXECULTR could not be determined and considered a limitation—more clearly defined in a follow-up study.

Another limitation of this study is the sample size. An ideal minimum sample size of 220 was suggested by several statistical consultants for this study. Gorsuch (1990) recommended no less than 100 while Guilford (1954) recommended at least 200 and Williams and colleagues (2010) rank 200 as good. Cattell (2012) claimed the minimum desirable size to be 250 and Yong and Pierce (2013) suggested 300. This study used a sample size of 350; yet, 500 would have been an ideal sample. With a 500 or greater sample, splitting the sample in two—one-half to conduct the EFA and the other half to conduct the CFA—would have been ideal for confirmatory purposes.

Finally, the geographic location of the sample was a limitation. That is, while it may be assumed that business travelers that identify as culturally-Chinese would generally reside in China, the sample profile identified that a majority of the subjects resided in the U.S.A.: 62% of this sample permanently resided in the U.S.A. (n = 216) while 35% resided in China (n = 124). This survey question was originally phrased, "In which country were you born? (five choices: China, Hong Kong, Taiwan, Macau, and other)" and was changed to, "In which country do you permanently reside? (195 choices)." While a plausible response to this variance is the expatriate community living in the U.S.A., there was a consideration for potential controversy. Expert guidance was requested early regarding the country-of-origin responses of Hong Kong, Taiwan, and Macau. In addition, defining the two regimes of China—from the standpoint of Hong Kong

and Taiwan—and the configuration of the One China Policy are layered factors, which further complicated the country-of-origin. For instance, Hong Kong is unofficially and by most practical measures its own country, but it is actually culturally and historically part of China; to the same degree, most Hong Kongers consider themselves Chinese persons, yet they do not consider themselves a part of China. Due to politically controversial and potentially ambiguous terms that position Taiwan and its associated territories as a state of China, it was decided that using the over-arching *identification as culturally-Chinese*, objectively balanced the need to define the subject's complex link to heritage, ethnicity, or culture against determining from which global point the subject was born.

Future next steps to provide further evidence of validity for the scales of LUXECULTR would include administering the survey to a new sample, repeating the same recruitment techniques, to examine discriminant and convergent validity and conduct a CFA with a sample greater than 500 subjects. Likely, ideal samples will derive from major luxury wine-consuming East Asian cities such as Shanghai, Beijing, and Guangzhou. Comparisons between samples from such cities, in addition to comparisons between samples from individual cities, pertinent regions, and China (nationally), would identify significant findings. Subjects will also be considered from significant Chinese wine producing regions, such as Ningxia, Shandong, and Xinjiang. Lastly, dependent variables will be incorporated into the instrument for statistical equation modelling and regression analyses to measure influence and prediction.

In conclusion, there are numerous important areas of research that must be addressed over the next ten years to allow for the continuing development of the luxury wine industry. These areas include retail marketing and consumer response to the variety of techniques retailers use; on-premise consumer behavior; online and social media influences on consumers; premium and luxury wine behavior and successful marketing practices; consumer behavior in emerging markets; the value of wine tourism and marketing for value; the relationship between grape/wine quality and consumer behavior; and consumer response to wine and health issues. These are worthy topics of study; yet, some may be considered unapproachable or too risky due to their innate invasiveness when gathering information about a consumer's and society's values. LUXECULTR may be used in future research to explore such worthy topics as the reproduction of consumption preferences based on cultural stereotypes, the defining of wine consumer class or status, the explorations of how cultural taste and legitimacy are tied to aspirational consumption, and learning what is next for discerning members of *The Chinese Phenomenon* as they seek alternatives to Lafite—due to potentially low supply—and find less-know elite global wines.

Will the *New Chinese Consumers*, such as business travelers, assimilate other areas of wine consumption? For instance, will decanting—the elegant removal of wine from the bottle to a pouring vessel, and from the vessel to a glass—be modified from the Western norm? Decanting—used to aerate, filter, modify temperature, and remove unattractive cellar olfactoral-nuances—is currently an understated element of Chinese wine presentation. Perhaps, the business travelers will not only assimilate, but modify the process of decanting with new cultural values? For example, using a (1) very wide-bottomed, (2) under lighted, and (3) top spotlighted decanter display that highlights the lucky red color of Screaming Eagle when (4) extravagantly poured from a (5) grandiose decanter are all modifications that may become part of the Chinese wine culture. To a similar degree, can members of *The Chinese Phenomenon* assimilate and modify so many facets of wine that they allude to a nouveau style of wine consumption?

Old World style wines, for instance from France and Italy, have served as the foundation from which other styles are compared. New World style wines, for instance from Australia and the U.S.A., are stylistically stark in contrast with Old World style wines. Wine from China, however, does not theoretically fit into either style. Notwithstanding the fact that the origin of wine in China preceded all modern producers of so-called Old World style wines, China as a producer and consumer of wine has the power, supported by success factors, to surpass the so-called New World style wine producing countries. The *New Chinese Consumer* luxury wine preference, therefore, deserves consideration of a new style classification, which we might call the East Asian World style.

This study accomplished the task of furthering research through the development of a framework based upon tested theory for understanding the motivators to consume luxury wine by business travelers that identify as culturally-Chinese. Furthermore, it filled a research gap and provided a fresh perspective with which luxury wine stakeholders may understand and respond to both *The Chinese Phenomenon* and other culture-based luxury wine consumers. With the development of LUXECULTR, this study has opened new direction for research on luxury wine preference; thus, this study makes a significant contribution to research and practice.

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