

An Empirical Analysis on Purchase Intention on Coffee Beverage in Taiwan

Ying-Fang Huang¹, Hoang Sa Dang ^{*2}

1. Department of Industrial Engineering and Management, National Kaohsiung University of Applied Sciences, No.415, Jiangong Rd., Sanmin Dist., Kaohsiung City 807, Taiwan (R.O.C.)
2. National Kaohsiung University of Applied Sciences, No.415, Jiangong Rd., Sanmin Dist., Kaohsiung City 807, Taiwan (R.O.C.)

* Email of the corresponding author: hoangsa8181@gmail.com

Abstract

Coffee is the most popular beverage in the world. However, in Taiwan, coffee is a second option for beverage choice after tea, which is the traditional beverage of this nation. Under the impact of Western culture, the habit of Taiwanese on beverage has become gradually change. In the recent years, the rapid growth of the various coffee supply channels such as coffee shop, coffee chains, fast food restaurants and convenience stores has assisted in creating a huge market for consumption coffee. Thus, understanding consumer's habit on coffee purchasing in non-coffee drinking habit market is crucial. It can offer some important information for coffee suppliers to formulate their market strategies in Taiwan. Therefore, in this study, the determinants of Taiwanese coffee drinker in purchasing coffee are defined. Results from 260 respondents were analysed by exploratory factor analysis and regression analysis. The findings demonstrate that brand & price, product image, promotion & advertising, motivation, atmosphere & environment and taste are critical factors which impact on coffee drinker's purchase intention. Among that, promotion & advertising plays the principal role to attract customers. Therefore, in order to create competitive advantages in the coffee beverage industry, the actions of promotion and advertising should be strong by coffee supplier. Besides, how to produce high quality of coffee beverages and maintain to meet the requirements of drinker's for good flavor and taste also must be considered.

Keywords: coffee beverage, purchase intention, Taiwan

1. Introduction

Consumer decision making has long been of interest in research. According to many professional researchers, the behavior that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs (Schiffman & Kanuk, 2007). It refers to the buying behavior of the ultimate consumer. As beverage manufacturers increase production speed and output, which also lowers costs, the industry continues to become increasingly streamlined and efficient, favoring its expansion. (Beverage industry Market Research and Statistics, Report linker website). The beverage industry is the largest industry compared to other industries, specially in coffee beverage industry. Coffee is a commodity tropical agriculture is the most traded and growing in more than seven countries of the world. Coffee unclear origin in eastern Africa and has become a commodity trade globally. It is one of the world's most popular beverages and most widely consumed liquid in the worlds aside from water. In Europe, coffee has become a culture and a beverage indispensable in people's lives (Hatbox, 1985). Chapagain & Hoekstra (2007) believe that coffee is an important beverage in the economy and society. It contributes to economic growth, developing countries and the relationship are more important to consumer in society.

Millions of people around the world to start a new day with a cup of coffee. Over twenty-five million people are sustained by the production of coffee and are linked to billions of consumers who drink it on a daily basis (Talbot, 2004). These days food is probably more fashionable than fashion, but there's one element of gastronomy with which hipsters are particularly obsessed, its coffee. It's one of the most popular beverages in disparate cultures around the globe. Coffee devotees today have many choices of coffee beverages based on the list of coffees with different ways of preparation. On the other hand, the coffee demand is rapidly rising in the recent year in the world, accounting for trade worth approximately US\$ 16.5 billion in calendar year 2010, when some 97 million bags of 60kg (5.8 million tons) were shipped. World production in coffee year 2010/11 is estimated at 131 million bags (7.8 million tons) while consumption in calendar year 2010 is estimated at 135 million bags (8.1 million tons).

Drinking coffee is a culture. It has many flavors with different ways of preparing to show the needs of the customer. What people want is more than a cup of coffee; actually, they want a café to satisfy their needs (Lee,

1998). It gives more choices for consumers who would choose a coffee to consume according to their individual needs, such as coffee quality, pricing, space, environment, or brand image (Kai, 2001).

Taiwan is Kingdom of tea, but is known as a nation of coffee lovers. Whether the rich smoothness of a latte or cappuccino or a cup of black coffee made from beans selected from a single estate that has roasted right there in the store. There's always something to please the most fastidious of plates. Taiwan's beverage industry was about NT\$43 billion (US\$1.45 billion) in revenues in 2013. In increasing competition, Taiwanese customer is becoming picky about their choice of coffee beverage, factoring in the product image, price, taste or brand. In recent years, coffee has become more popular in Taiwan; it is no longer a luxury drink that becomes familiar in life. Due to the rapid growth of the economy and the increase of people's income, people's lifestyle in Taiwan has been largely westernized. The increased purchasing power and the chance of creating a culture of consumers in Taiwan have driven a large consumption of coffee beverage. Addition, with the widespread popularity of convenience stores and coffee shop consumers can easily buy coffee drinks as they want.

Today the customer is the center of all business sectors. Thus the decisions - making of customers affect the existence of a store or business. Therefore, understanding the habits of customers on coffee purchasing is necessary for coffee supplier in improving their business strategies. Drinking coffee different in another beverage, it is a unique culture, the habits of coffee drinkers have different in various countries.

Based on those facts, the purposes of this study are to explore the various factors that influence the coffee beverage purchase intention and understanding about the coffee culture in Taiwan. Due to perform this task, questionnaires are designed based on the finding of relevant previous research, survey method is applied to assess the information from respondents.

This paper is organized as follows. In section two, the relevant literature is reviewed and the hypotheses are outlined. The section 3 presents the methodology. While empirical results and discussion are explained in section 4 and section 5. And the conclusions of the study are drawn in the final section.

2. Theoretical background and hypotheses development

This paper focuses on some theories which relate to the factors that influence purchase intention on coffee beverage of customers. Research developed ten hypotheses, that are: Product image, price, product attributes, atmosphere & Environment, brand image, taste, health benefits, motivation, promotion & advertising and convenience. Each hypothesis is investigated empirically.

Purchase intention as the situation in which a customer is willing to make a transaction with the retailer. Purchase intention means a consumer prefers to buy a product or service because they find that their needs a particular product or service, or even attitude towards a product and perception of the product. The same that purchase intention means consumers will purchase a product once again after they evaluate a product and find out that the product worth buying. Consumers' buying decision is very complex. Usually purchasing intention is related to consumers' behavior, perception and their attitude. Purchase behavior is an important key point for consumers during considering and evaluating of a certain product. Ghosh (1990) stated during that purchase intention is an effective tool used in predicting purchasing process. Once the consumers decide to purchase the product in a certain store, they will be driven by their intention. However, purchase intention might be altered by the impact of price, quality perception and value perception (Zeithaml, 1988; Grewal et al., 1998). In addition, customers will be interrupted by internal impulse and external environment during the purchasing process. Their behavior will be driven by the physiological motivation that stimulates their response which brings them to the retail store to fulfill their need (Kim and Jin, 2001).

Besides that, purchase intention is the implied promise to one's self to buy the product again whenever one makes the next trip to the market (Fandos & Flavian, 2006; Halim & Hameed, 2005) and depicts the impression of customer retention. Furthermore, previous studies (Pi et al., 2011; Pavlou and Gefen, 2004) have found that purchase intention as a key factor really influences consumers' actual buying behavior and the purchase intention may influence transaction activities in the future.

2.1 The influence of Product Image on coffee purchase intention

A photograph or diagram that depicts a good being offered for sale. Numerous product image types taken from different angles and blow ups are often used extensively by businesses that market their goods in online advertising and e-commerce websites to attract customer interest and purchase. The discussion of self-image and

product image congruity was initiated by Gardner & Levy (1955) and Levy (1959). The main attention was focused upon the image projected by various products. Further, consumers were thought to prefer products with images which are congruent with self-image (Douglas et al., 1967). The notion that products have dimensions beyond functional utility is perhaps a singular contribution to consumer behavior. Dolich (1969) studied self-image and the product image of most and least preferred brands within four product categories. He found that there was greater congruity between self-image and most preferred brand over all four product categories. Therefore, hypothesis 1 is offered as follows:

Hypothesis 1(H1): There is a positive relationship between product image and purchase intention.

2.2 The influence of Price on coffee purchase intention

Price is a key factor in stimulating consumers to purchase (Kotler and Keller, 2006). Consumers' opinions are governed by price consciousness. [Broekhuizen and Alsem \(2002\)](#) suggest that customers are often willing to pay a premium for customized products because their needs are better met. If a company facilitates the creation of a co-production process to make a product tailored to the customer's needs and the product adds great value, price becomes a less important factor ([Wind and Rangaswamy, 2001](#)). There is less incentive for customers to comparison shop based on price. Personalization reduces the similarity across competing products or brands, thus, making a direct price comparison more difficult for consumers. Although search costs for price are generally low online ([Bakos, 1997](#)), in this case the cost increases. Consumer search costs for price and product attributes such as quality are a key concept in online price research. [Lynch and Ariely \(2000\)](#) found that price competition is reduced when the cost of searching for prices is higher than the cost of searching for product attributes. Similarly, [Zettelmeyer \(1998\)](#) explores a scenario in which firms compete with two distribution channels and control the amount of product information provided to consumers who are uncertain about their preferences. His research shows that firms can achieve finer consumer segmentation by strategically influencing search costs. Therefore, hypothesis 2 is offered as follows:

Hypothesis 2 (H2): There is a positive relationship between price and purchase intention.

2.3 The influence of Product attributes on coffee purchase intention

Wickliffe and Pysarchik (2001) elaborate product attributes as those important features which have intensive influence on the behavior of the consumers' i.e brand and price. These are the two factors which cover major areas of the product attributes, but there are some other elements of the attributes like structure, look, color, weight and quality, etc. Abbott et al, (2009) explain product attributes as the sensory processes of the product, its cognitive features and casual properties it includes the design, technology engineering processes of the product which form the overall rating of the product on the part of consumers. So it shows that product attributes are those features of a brand which make its position in the market, which may be strong or weak and consumer satisfaction is totally based on the product attributes.

Bian and Moutinho (2011) explained the phenomenon as the expressive features that distinguish the product from others. Intrinsic and extrinsic are two types of attributes. Intrinsic are those information bundles which influence the product directly and extrinsic are those information bundles which influence the product indirectly. Attributes of the product is in fact the reflection of the company's image it consists of the features of the product. It is the features which distinguish from other products. Attributes play a vital role in achieving brand equity. The satisfaction level of the consumers firmly depends on the attributes. If consumers are more satisfied, they will show interest in the particular product and make purchases repeatedly. Their study found a significant effect of product attributes on consumer purchase intention. On the basis of available literature, this study can develop our hypothesis.

Hypothesis 3 (H3): There is a positive relationship between product attribute and purchase intention.

2.4 The influence of Atmosphere & Environment on coffee purchase intention

Literatures proved that store atmosphere and purchase intention have a positive relationship; the physical attractiveness of a store has a bearing on the customer's willingness to spend time there and do shopping. More than the quality, general price level or selection of products the attractive store atmosphere has a higher correlation with purchase intentions (Yalcin & Kocamaz, 2003). The store atmosphere consists of lighting, music, layout, furnishing, colors and scents, and these serve as a stimulus which aids the customers' behavioral response

in a positive manner. The intentions of a customer to purchase are determined by their willingness to stay in the store, their inclination towards making a repurchase and their willingness to recommend the store to others (Brady & Baker, 2002).

This may also help retailers in forecasting their sales and in formulating their marketing strategies to increase the purchase intention of customers. Previous studies also second the positive relationship between purchase intention and the store atmosphere, 28 studies backed the positivity of this relationship and concluded that the variables related to store atmosphere were effective in determining or influencing the purchase intentions of the customers (Hedrick & Beverland, n.d.). A study conducted at the retail stores of turkey highlights the fact that a store atmosphere can be attractive enough for the customers to enter, but to make a purchase, different features of the atmosphere make a critical impact such as the layout, crowding, waiting time in lines etc. (Yalcin & Kocamaz, 2003). The external and internal atmosphere both contributes to the customer behavior and it has been proved that the internal atmosphere significantly impacts the decision making process of the customers at the point of purchase (Baker & Grewal, 1994). Similarly a study from Taiwan infers that the purchase intention is considerably impacted by the store environment as it influences the consumer's potential benefits and perceived value.

Retailers start to understand the importance of environmental cues and try to develop effective store atmosphere so as to increase the profit by attracting the target consumer (Seock, 2009). Donovan and Rossiter (1982) indicated that an environment could change the consumers' mood, and it could influence the behavior of retailing or service provider's performance. In the past, most of the store environment studies focused on store impression, how consumers evaluate the products, and improving the perception towards the quality of products and service (Baker et al., 1994; Darden and Babin, 1994). The current studies have not discussed how multiple store environmental cues shape the consumer's perceived value and how these perceptions influence consumer purchase behaviors, yet (Baker et al., 2002); discussing store environment cues would be contributing to designing an appropriate environment to satisfy consumer preferences.

Baker (1986) presented a typology categorizing the elements of store environment in three categories: social, design and ambient factors. Social factors relate to salespeople in the store, ambient factors relate to the non-visual elements of a store's environment, and design factors are visual in nature (e.g. layout, color, cleanliness, clusters, space, etc.). Gulas and Bloch (1995) suggested a small change of an environment could increase the perceived novelty and joyfulness of this environment. Therefore better evaluation could be created and the consumer behavior could be promoted. Kotler (1973) stated that the design of purchasing environment could make the consumers produce certain specific feelings, so that the opportunity for consumers to purchase would be promoted. According to the above mentioned points, the following hypotheses are proposed:

Hypothesis 4 (H4): There is a positive relationship between atmosphere & environment and purchase intention.

2.5 The influence of Brand Image on coffee purchase intention

The brand image is an important aspect towards purchase intention. It peoples the consumers to consume more value on the specific brand having a good brand image. It helps consumers decide whether which brand is a better option for them and they are forced to make a purchases intentions couple of times. A good brand image helps to create long term relationships between the product and ultimate users. It is a very constructive way to make better brand personality in the market for the purpose to enhance the sale of the product. Product attributes, brand personality and brand benefits are the three key gears of the brand image. Higher the brand image, higher will be the purchase intention. Wu and Wu (n.d) studied every dimension of the brand image and found the considerable effect on the consumer purchase intention. They collected respondents aging 18 to 40 years in three countries like Taiwan, Japan and Europe. They analyzed the data and confirmed that each dimension of brand image has a positive impact on the level of purchase intention.

Chi, Yeh and Huang (2008) studied the influence of brand image on customer purchase intention. They developed 53 questions in six parts to verify that the brand image is significantly and positively related to the purchase intention. Linet. Al. (n.d) studied the relationship between the brand image and purchase intention and proved that the brand image has a significant positive relationship with the consumer's purchase intention. Eze, Tan, Yeo (n.d) researched brand image to find out its influence on the consumer purchase intention. So based on the above studies. This study can develop our hypothesis:

Hypothesis 5 (H5): There is a positive relationship between brand and purchase intention.

2.6 The influence of Taste on coffee purchase intention

Consumer taste is a critical factor affecting customer purchase decisions regarding horticultural products. Recognition of this fact is perhaps the major reason for the growing interest among horticulturists in observing and measuring customer attitudes about these products. Some studies took his opinion study approach, whereby consumers are requested to rank the importance of attributes relative to their purchase decisions and to indicate how these attributes would affect their future purchase patterns (Brooker et al., 1987).

Matlin (1983) defines 'taste' as the perceptions that result from the stimulation of the taste receptors in the mouth. Taste responses are generated by taste receptor cells responding to gustatory stimuli, chemical substances soluble in saliva, using a complex arrangement of receptor molecules, signalling cascades and ion channels (e.g., Matlin, 1983; Sekuler & Blake, 1990). When stimulated, taste cells produce action potentials that result in the release of neurotransmitters into several afferent nerve fibers. Subsequently, the neural impulses relay the identity and intensity of the gustatory stimuli to the brain. In some ways, taste perceptions and evaluations are innate and automatically regulated by physiological mechanisms (Sherwood, 1997). The avoidance of bitter flavors may be evolutionary advantageous, as toxins and poisons often have a bitter taste (Pliner, Herman & Polivy, 1990). These innate taste preferences are to some extent flexible, adjusting to the body's nutritional and physiological needs (Scott, 1990). On the basis of available literature, this study can develop our hypothesis:

Hypothesis 6 (H6): There is a positive relationship between taste and purchase intention.

2.7 The influence of Health benefit on coffee purchase intention

Health consciousness best describes those "consumers [who] are aware and concerned about their state of well-being and are motivated to improve and/or maintain their health and quality of life, as well as preventing ill health by engaging in healthy behaviors and being health conscious regarding health. Such individuals tend to be aware of, and involved with, nutrition and physical fitness" (Kraft and Goodell, 1993).

In recent years a number of studies have suggested potential health benefits (as well as risks) associated with coffee consumption; the results are controversial in the sense that they are not totally conclusive one way or another. Whilst coffee has been reported to increase cardiovascular risk factors such as high blood pressure. Some studies suggest a protective effect on the heart and decreased risk of stroke. Other studies have focused on coffees protective effects on health issues ranging from type 2 diabetes to Parkinson's disease, liver disease, and obesity. Based on this, the following hypotheses:

Hypothesis7 (H7): There is a positive relationship between health benefits and purchase intention.

2.8 The influence of Motivation on coffee purchase intention

Consumer motivations are triggered by the many stimuli surrounding us in everyday life. These can be ads in the grocery store, the speech of others, unconscious emotions, conscious feelings, news received, colors and shapes, etc. (Simonson, 2005) These motivations can both be conscious and unconscious and is typically influenced by the countries cultural variations. (Usunier et al, 2009). For ages, voluminous studies have worked with exploring effortful consideration or judgment in relation to conscious decision making such as gambling theories. (Bargh, 2002). Today, newer studies within consumer neuroscience have explored the importance of understanding unconscious motivation factors as these are very prevalent in the everyday lives of consumers.

Consumers in the real world have many other goals and needs in their everyday than conscious processing of product-relevant information and advertising. Consumers therefore often tend to get affected by unconscious stimuli driving them to un-rational consumption of e.g. high prices and brands they find trustworthy. Consumers can be driven by several motivation factors, including cognitive processes, relating to a need for proper attention and judgment from the outside world. Sirgy (2013) further explains that motivations can be controlled by the consumer's actual self (referring to how the consumer perceives him- or herself) ideal self (referring to how the consumer would like to perceive him- or herself) and social self (referring to how the consumers present themselves to others). Striving for a certain self-image can lead to the specific behavior of carrying certain brands. Based on above discussions, we develop the following hypotheses:

Hypothesis 8 (H8). There is a positive relationship between motivation and purchase intention.

2.9 The influence of Promotion & Advertising on coffee purchase intention

Marketing mix is the cause of the additional costs such as the cost of advertising, product development, promotion, distribution and packaging (Noble and Gruca, 1999). Among the marketing mix, promotion strategy is executed to motivate and remind the target market for a product or service. Although promotion activities could be very costly, it is a vital communication between the seller and the buyer of the attitudes and purchasing behavior (Kotler, 2002). Purchase intention refers to the extent to which consumers want to buy a product or service. Usually, consumers will compare the differences among alternative offerings and rival promotion programs (e.g. discount, redemption, distribution or premium) including the location and condition of the product purchased (Zeithaml et al., 1985). The needed information and time for decision-making to an individual consumer are different. Some products require a lot of information and take a long time for comparison, but some products do not need, such as a convenience goods (Engel et al., 1993).

Using advertising to promote a product is a very popular marketing strategy. Advertising is often viewed on TV, newspaper, magazine, or direct mail advertisements in daily life. The idea is to use endorsers' popularity to endorse a product and make consumers produce reliability of the product. Researchers also found that the reliability of advertising spokespersons is one of the critical factors to influence purchase intention, and the higher the reliability is, the higher the positive advertising and brand attitudes are (Laffery & Goldsmith, 1999). An advertisement can catch consumers' attention and increase brand awareness (McCracken, 1989), and transfer consumers' feelings onto the product and produce a good impression. (Biswas et al., 2006). If spokespersons can express a positive attitude on the advertised product, it will create an intense preference of consumers and connect the product with the spokespersons (Chen & Chang, 2001). Based on the literature, this research proposes the following hypothesis:

Hypothesis 9 (H9): There is a positive relationship between promotion & advertising and coffee drinker's purchase intention.

2.10 The influence of Convenience on coffee purchase intention.

Convenience stores (c-stores) constitute a successful format in developed markets such as the U.S., Canada, Europe, and Japan. As an example, 7-Eleven became the largest worldwide convenience store chain in March 2007, operating 34000 stores in 17 countries, even larger than the worldwide number of McDonald's stores (Planet Retail, 2007). Large multinational retailers are also opening convenience store formats in different markets. Only a few studies of convenience stores (c-stores) are found in the literature and they have all been held in a developed market context (Lassk, 2000; Rapp and Islam, 2006; Sparks, 2000; Sutton and Rafaeli, 1988; Welsh et al., 2003; Worthington, 1989). These studies show that salient convenience store attributes for consumers are located, product assortment, knowledge of sales associates, speed of the checkout, service, store layout, and parking. Yet, little is known about consumer expectations of convenience store attributes and preferences of products and services in different countries.

Access convenience concerns the speed and ease with which consumers can reach a retailer. It considers attributes such as accessible location, parking availability, store hours, proximity to other stores, and telephone and internet access. The speed and ease that consumers can make contact with retailers powerfully influences their retail choices. In addition to a convenient location, other convenience incentives offered by retailers, such as longer operating hours or ample parking, can draw patrons to a store (Hansen and Deutscher, 1977). Based on this, the hypotheses were followed:

Hypothesis 10 (H10): There is a positive relationship between convenience and purchase intention.

As mentioned above, the conceptual framework for this study is drawn as figure 1.

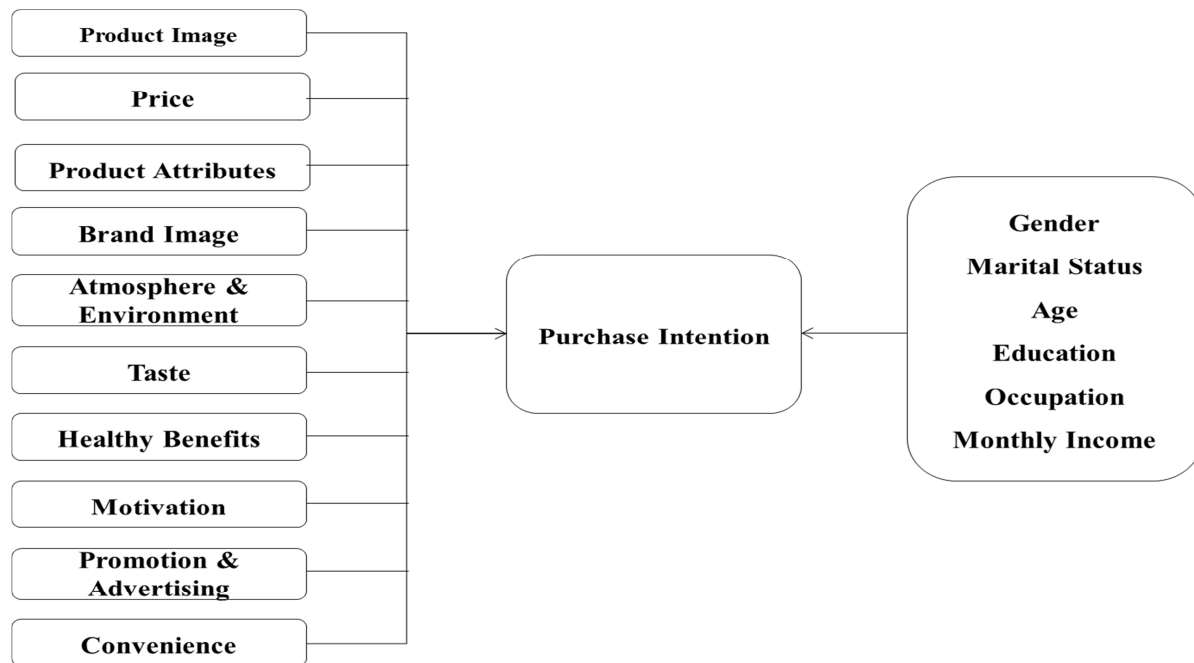


Figure 1. Conceptual Framework

The framework examines the factors that could possibly affect the purchase intention. Research hypotheses will be tested in this paper contains constructs that have demonstrated theoretical support.

3. Methodology

This section presents the research methodology. We first describe the sample collection, and design the questionnaire, then present the analytical approach.

3.1 Design and Development of the questionnaire

Questionnaires are an efficient method of data collection when the researcher knows exactly what should be asked and how to measure the variables of interest in order to achieve relevance and accuracy (Sekaran 2000; Zikmund 1997). A questionnaire was designed for this study, aimed at empirically testing our research model which resulted from the literature review and then draw conclusions about the factors that influence the purchase intention in decision-making to select coffee beverages to the consumer. Design a questionnaire is mainly divided into three parts. A questionnaire was originally developed in English. The English version of the questionnaire was doubling back-translated into Chinese. The first of the questionnaire-questions. Number 1-8 is to establish basic demographic data. They are addressed to people who lived in Kaohsiung, Taiwan. Fisher (2007) is against questionnaires that ask about more personal demographic data than is necessary for a project. As such, this first section of the questionnaire asks dichotomous questions about the target respondent's gender, age, education, occupation, marital status, monthly income; frequency of having coffee and how many cups of coffee do you drink per day. The second part includes thirty four questions for understanding the actual consumption of coffee beverages of consumers. The third and last part is purchase intention of consumers when choosing coffee beverages.

Questionable content was based on the research objectives. The objective of this study was to determine the factors influencing consumers in decision-making to purchase coffee beverages. Question development was based on the principles of good question design such as brief questions that can be applied to all respondents, use positive questions, avoid leading questions, and so on (Cooper & Schindler 2001; Frazer & Lawley 2000; Zikmund 1997).

3.2 Sample collection :

A quota-sampling method was adopted for data collection. The questionnaire surveys were distributed to student and people around Kaohsiung, who were asked to fill out the questionnaires. Prior to conducting the formal survey, 330 formal surveys were distributed and 280 were returned (response rate 84.8%). After eliminating incomplete surveys, valid surveys totaled 260 (response rate 78.8%) were coded and analyzed.

This study adopted a five-point Likert scale to collect responses from respondents (1=strongly disagree,

2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree) for all questions (Bryman and Bell, 2007; Cheng et al., 2012). The items of the questionnaires include decision-making reasons/factors: Product image, Price, Product attributes, brand, atmosphere & environment, taste, healthy benefits, motivation, promotion & advertising and convenience. The measurement for purchase intention referenced from the study of Zeithaml (1998), Chen (2004), Wu (2006) and the scale developed by Doldd et al (1991).

3.3 Data analytical approach

There are totally eight main analyses applied in this study: reliability analysis (Cronbach's Alpha) to test the internal consistency of the variables in a factor, exploratory factor analysis to find out the actual factor effect of the decision-making of people in Kaohsiung city in coffee beverages choice, correlation matrix to review the correlation of factors on coffee beverages choice, multiple linear regression analysis to figure out the importance role of each factor in forming the coffee beverages choice and purchase intention. Independent t-test and one-way ANOVA was used to test the difference between purchase intention and demographics characteristic. The findings will be fundamental elements to suggest appropriate solutions in the last section

4. Empirical results

This section presents the demographic characters of respondents, and data analysis results

4.1 Demographic Characteristic

The survey lasted from 24th April to 30th April; 2014. In this research, the initial sample size was 330 people around Kaohsiung. Among 330 questionnaires, twenty questionnaires were deleted because of missing data (5 respondents) and giving the same answers for all questions (15 respondents). Therefore, 260 questionnaires were valid data. Where consumer volume was 330 and the number of respondent answers was 260 with the filling-in rate 78.79%. The following comprise a brief overview of the demographic data which were collected based on results provided by respondents. The background information of the subject included: Gender, marital status, age, education, occupation, incomes, frequency of having coffee and cups of coffee/day. The table1 shows the complete description of consumers' characteristics. The following paragraphs analyze each item.

Table 1: Descriptive statistics of survey objects

<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Gender</i>		
Male	174	67%
Female	86	33%
Age		
18-28	77	29.61%
29-39	141	54.23%
40-50	32	12.31%
Above 50	10	3.85%
<i>Marital Status</i>		
Single	192	74%
Married	68	26%
<i>Education</i>		
High school	29	11.15%
University	74	28.46%
College	65	25%
Master	64	24.62%
Undergraduate	28	10.77%
<i>Occupation</i>		
Self-employed	13	5%
Office worker	98	38%
Unemployed	45	17%
Student	72	28%
Manager	32	12%
<i>Income</i>		
Less than NT\$10000	21	8%
NT\$1000~NT\$19000	104	40%
NT\$20000~NT\$40000	102	39%
Over NT\$40000	33	13%

<i>Frequency of having coffee</i>		
Everyday	29	11%
Once a week	74	28%
2-3 times a week	80	31%
More than 3 times a week	77	30%
<i>Cups of coffee/day</i>		
1 cup	115	44%
2-3 cups	113	43%
4 cups	28	11%
More than 4 cups	4	2%

Source: Compiled by author

4.2 Reliability Analysis

To test for reliability, the Cronbach's Alpha was calculated for each of the question sets. Cronbach's Alpha is the most common measure of internal consistency. It is most often used when you have multiple Likert questions in survey/questionnaire that form a scale. The scale was selected as Cronbach's alpha coefficient of 0.6 or higher.

Table 2: Reliability test

Variables	Number of item	Cronbach's Alpha
Product Image	4	0.822
Price	3	0.830
Product Attributes	4	0.861
Brand	3	0.775
Atmosphere & Environment	4	0.661
Taste	3	0.740
Healthy Benefits	4	0.574
Motivation	4	0.758
Promotion & Advertising	4	0.809
Convenience	4	0.535
Purchase Intention	4	0.822

Source: Compiled by author

Reliability test results shows as table 2, it shows that all value is over 0.60 indicating efficient internal reliability of all measurement items for their scale in this sample except "Healthy Benefits" and "Convenience" with Cronbach's alpha 0.6. So we eliminated two factors: Healthy Benefits and Convenience. Besides that, the nine Cronbach's alpha values of Product Image, Price, Product Attribute, Brand, Atmosphere & Environment, Taste, Motivation, Promotion & Advertising and Purchase Intention are 0.822, 0.830, 0.861, 0.775, 0.661, 0.740, 0.758, 0.809 and 0.822 respectively. Based on these results we held that every set of question items was satisfactorily reliable.

4.3 Exploratory Factor Analysis

Prior to the application of factor analysis, validity test was undertaken. We used Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity to verify whether 37 items of the questionnaire are suitable for factor analysis. As the result, an examination of the Kaiser-Meyer-Olkin measure of sampling adequacy suggested that the sample was able (KMO=0.859). Bartlett's test showed that $p < 0.001$. Hence, factor analysis can be conducted on the data. The study uses principal component analysis with varimax rotation to extract major factors. The item will be extracted, when the eigenvalues are greater than 1 and the cumulative explained variance exceeds 60% (Wu, 2000).

Initially, the factorability of the 29 items was discussed. As a result, seven factors were extracted in the coffee beverage and purchase intention including brand & price, product image, product attributes, motivation,

promotion & advertising, atmosphere & environment and taste. The cumulative explained variance is 69.498%. The initial Eigenvalues showed that that Brand and Price had eigenvalues of just one factor, this factor explaining 12.932% of the variance, the second factor 11.678% of the variance, the third factor 10.338% of the variance, the four factor 9.232% of the variance, the five factor 9.138% of the variance, this six factor 8.314% of the variance and the seven factor 7.775% of the variance, respectively. During several steps, a total of two items were eliminated because they did not contribute to a simple factor structure and failed to meet a minimum criteria of having a primary factor loading of 0.4 or above, and no cross-loading of 0.3 or above. It's "Quality of coffee beverage" and "Brand Image". Results of Exploratory factor analysis are shown in Table 3.

Table 3: Exploratory factor analysis

Factors name	Eigenvalues	% of variance	Cumulative %
Brand & Price	3.492	12.932	12.932
Product Image	3.153	11.678	24.611
Product Attributes	2.791	10.338	34.948
Motivation	2.517	9.232	44.272
Promotion & Advertising	2.467	9.138	53.41
Atmosphere & Environment	2.245	8.134	61.724
Taste	2.099	7.775	69.498

Source: Compiled by author

4.4 Correlation Analysis

Before running linear regression analysis, we must look at the correlation coefficient to check the relationship between the dependent variable with the independent variables and the relationship between the independent variables has correlated with each other or not. If the correlation coefficient between the dependent variable and the independent variables highest it have a strong positive relationship.

Table 4: Pearson's correlation between variables

	Brand & Price	Product Image	Product Attributes	Motivation	Promotion & Advertising	Atmosphere & Environment	Taste
Purchase Intention	0.053	0.425*	0.943*	0.290*	0.204*	0.245*	0.188*

Note: *. Correlation is significant at the 0.05 level

** . Correlation is significant at the 0.01 level

Source: Compiled by author

As the results are shown as table 4, correlation matrix supports all hypothesized positive relationships among the eight variables with high statistical significance. The correlation between products attributes and purchase intention was the highest (0.943) at the 1 % level of significance and the correlation between brand & price and purchase intention was the lowest (0.53) at 1%. This implies that there is a strong positive relationship between promotion & advertising and purchase intention.

4.5 Regression Analysis

The F value was used to test the significance of the regression model and was examined first. When the p value of F test is not significant at the level 0.05 ($p > 0.05$), the model is considered insignificant and the null hypothesis that there is no linear relationship with purchase intention and seven factors influencing coffee beverage choice of the customer was accepted. The table 5 is the results generated from the multiple linear regression analysis of the relation between the seven factors: brand & price, product image, promotion & advertising, motivation, product attribute, atmosphere & environment and taste on purchase intention.

The results of the study show that brand & price, product image, promotion & advertising, motivation,

atmosphere & environment and taste are important in regulating the purchase intention. Besides that, promotion & advertising such as discount coupon, special price product, media advertising, and newspaper & magazine impact the stay time of an individual in the store and also the decision to make a purchase from the store.

Table 5: Regression analysis results

Independent variable	Dependent Variable	
	Purchase Intention	
	Standardized Coefficients beta	t
Constant	8.425E-17	0.000
Brand & Price	0.135 (0.000***)	9.302
Product Image	0.169(0.000***)	11.645
Promotion & Advertising	0.938(0.000***)	64.713
Motivation	0.108(0.000***)	7.461
Product Attributes	0.180(0.214)	1.247
Atmosphere & Environment	0.075(0.000***)	5.206
Taste	0.049(0.001***)	3.406
R ²	0.947	
Adjust R	0.946	
F	643.695	
St Error	0.233	

Note: (): P, (*) P<0.05, (**) P<0.01, (***) P<0.001

Source: Compiled by author

The regression analysis shows that all of factors have a positive and significant relationship with the consumer purchase intention with the promotion & advertising being stronger than another. Similarly, the relation of promotion & advertising has also been found to be positive and highly significant in determining the purchase intention of the consumers and product attributes have no significance in purchase intention.

4.6 Respondents' Demographic and Purchase Intention

The independent-sample t-test was employed to compare the mean score for two different groups of subjects: Gender and Marital Status. One way ANOVA were also used to compare the mean score of multiple groups of subjects: Age, education, occupation, monthly income, frequency of having coffee and cups of coffee per day. And all differences described as significant if are significant at the p< 0.05 level unless otherwise indicated.

The results of the independent T - test in the table 6, used by the author have demonstrated that there are no gender differences between male and female as well as marital status of agreement level of coffee beverage.

Table 6. T test results on gender and married status variables

Variables	N	F	P (significant level)
Gender	260		
Female	86	0.037	0.300
Male	174		0.301
Marital Status	260		
Single	192	0.218	0.617
Married	68		0.619

Source: Compiled by author

Addition, the results of ANOVA test in table 7 has showed that the significant level of among different groups of age (0.261); education (0.296), occupation (0.784), income (0.657), frequency of having coffee (0.616); a cups of coffee per day(0.331), which are all greater than α (= 0.05), which means that there is no difference by groups of age, education, income, occupation, frequency of having coffee and frequency of cups of coffee per day about the level of agreement of coffee beverage choice.

Table 7. ANOVA test results

Variable	F	P (significant level)
Age	1.342	0.261
Education	1.235	0.296
Occupation	0.434	0.784
Income	0.537	0.657
Frequency	0.600	0.616
Cup of coffee	0.600	0.331

Source: Compiled by author

5. Discussion

The purpose of this study is to understand what factors will influence the coffee beverage choice and purchase intention of the customer in Taiwan. Based on the survey result, percentage of Taiwanese between consuming coffee beverages at least once a week. The main reason for this consumer drink coffee was to boost energy levels and to stay awake at work. Convenience stores, where the preferred location to purchase packed coffee drinks.

In summary, the results mentioned above. The respondents cover all of the classifications of each item. Overall, based on respondents' replies, a majority of respondents who patronize coffee beverages and purchase intention in the Kaohsiung area are male, accounting 67%, there are more single consumers than married consumers, accounting for 74%. This can be possibly explained by single usually having more freedom in time allocation, but it can also be caused by work demands. As for the age distribution, students from the main consumer group for the coffee beverages, choice and purchase intention in Kaohsiung, accounting for 27.69%. Consumers with a monthly income of NT 10000~ NT 19000 formed majority, at 40% and the minimum income received by the students.

For the 260 effective questionnaires, the coffee is supplied by convenience stores such as 7-11. Hi-life and Family Mart is the most frequently visited to buy coffee beverages amongst the respondents. The statistic discovered that the main reason that consumers in Kaohsiung visit a retail store because the atmosphere quiet and comfortable. In terms of consumption frequency, most customers patronize buying coffee beverages from 2-3 times a week, accounting for 30.76%. This makes the retail store places that can be visited at any time, which is different from the past, when the motivation was to relax or stay awake for work during weekends.

The result reveals that brand & price, product image, promotion & advertising, motivation, atmosphere & environment and taste have significant influence on purchase intention. Among them, promotion & advertising is a critical factor. The results indicated that the dimensions of promotion & advertising that consumers' in Taiwan considered when purchasing coffee beverages including discount coupon, special price product and advertising. When consumers buy a product, they will compare it. A product with a good character and reasonable price can make consumers have a high level satisfaction and confidence to purchase it. The higher marketing is higher purchase intention. The customer will follow promotion & advertising to make a purchase decision and purchase

intention.

6. Conclusion

According to the purpose of this study and based on a comprehensive review of coffee beverages and purchase intention related research, the factors that affect Taiwanese coffee drinker's attitude towards coffee beverage choice and purchase intention were defined. Empirical results are proved that some key factors, such as brand and price, atmosphere & environment, taste, motivation, promotion & advertising and convenience influence to consumer attitude on the purchase intention of coffee beverages. The findings of this study provide valuable insights about Taiwanese consumers who have a positive attitude toward purchasing coffee beverages. The outcomes of this study can help to coffee supplier to improve the customer strategies. In addition, in order to create competitive advantages in the coffee beverage industry, the actions of promotion and advertising should be strong by coffee supplier. Besides, how to produce high quality of coffee beverages and maintain to meet the requirements of drinker's for good flavor and taste also must be considered

However, this research has several limitations and cautions should be considered. First, the sample population only included customers in Kaohsiung; therefore, it may not be suitable to apply the research results presented herein to other parts of Taiwan. Different cities have different types of customers and different economic levels. The samples in this study are from Kaohsiung and the results point to this particular conclusion. However, if this research were to be conducted in other cities, such as Taichung, Taipei or another country, the results might be different. The group customer buying coffee beverages just stayed in Kaohsiung. Future research can involve researchers doing a comparison between group customer in Kaohsiung and other locations. Second, the empirical data for this study are only collected through the questionnaire method. In future studies, other researchers may wish to bring qualitative research to get more detailed information from customers. Third, some issues concern to the factors impact on the growth of the coffee market, and how to make the competitive advantages of the coffee with tea and other beverages in Taiwan beverage industry, or study on the drinking habit of coffee and tea in modern lifestyle et al., are considered for future research

Reference

- Abbott, P. B. et al, (2009), "LIGO: The Laser Interferometer Gravitational-Wave Observatory", *Report on Progress in Physics*, **72**(7).
- Baker et al, (1986), "Care Labeling for Upholstered Furniture: Consumers' Expressed Needs and Preferences", *Journal of Consumer Studies and Home Economics*, **10**, John Wiley and Sons, 279-289.
- Baker et al, (1994), "The Influence of Store Environment on Quality Inferences and Store Image", *Journal of Academy of Marketing Science*, **22**(4), Springer, 328- 339.
- Baker et al, (2002), "Considerations for Functional Assessment of Problem Behavior among Persons with Developmental Disabilities and Mental Illness", *NADD Bulletin*, **9**(1), 51-66.
- Bakos, Y. (1997), "Reducing Buyer Search Costs: Implications for Electronic Marketplaces", *Management Science*, **43**(12), Informs, 1-27.
- Bargh, J.A. (2002), "Losing Consciousness: Automatic Influences on Consumer Judgment Behavior and Motivation", *Journal of Consumer Research*, **29**, 280-285.
- Biswas et al, (2006), "The Differential Effects of Celebrity and Expert Endorsements on Consumer Risk Perceptions", *Journal of Advertising*, **35**(2), Routledge- Taylor & Francis Group, 17-31.
- Broekhuizen, T. L. J. & Alsem, K. J., (2002), "Success Factor for Mass Customization: A Conceptual Model", *Journal of Market- Focused Management*, **5**, Springer, 309-330.
- Brooker et al, (1987), "Consumers' Perceptions of Locally Grown Produce at Retail Outlets", *Journal of Food Distribution Research*, **18**(1), 99-107.
- Brooker et al, (1988), "Branding Locally Grown Produce at Retail Supermarkets", *Journal of Food Distribution Research*, **19**(1), 51-60.
- Chen, C.H & Chang, Y.W, (2001), "The Impact of Brand Associations on Brand Equity", *Journal of Management*, **18**(1), 3-14.
- Chi, H.K, Yeh, H.K & Huang, M.W, (2008), "The Influences of Advertising Endorser, Brand Image, Brand

- Equity, Price Promotion on Purchase Intention-The Mediating Effect of Advertising Endorser”, *Journal of Global Business Management*, **5**(1), 224-233.
- Dolich, I. J. (1969), “Congruence Relationships between Self Image and Product Brands”, *Journal of Marketing Research*, **6**, 80-84.
- Donovan, R. & Rossiter, J. (1982), “Store Atmosphere: An Environmental Psychology Approach”, *Journal of Retailing*, **58** (1), Elsevier, 34-57.
- Douglas et al, (1967), “Effects of Acetylcholine and Other Medullary Secretagogues and Antagonists on The Membrane Potential of Adrenal Chromaffin Cells: An Analysis Employing Techniques Tissue Culture”, *Journal of Physiology and Pharmacology*, **188** (1), 107-120.
- Engel et al, (1993), “Consumer Behavior”, 7th ed. Newyork: *The Dryden Press*.
- Eze, U.C, Tan, C.B & Yeo, A.L.Y. (n.d), “Key Determinants of Purchase Intentions for Cosmetics Products: Gen-Y Perspective”, *International Conference on Marketing*.
- Fatima, G. (2012), “Impact of Peer Pressure and Store Atmosphere on Purchase Intention: An Empirical Study on the Youngers in Parkahan”, *International Journal of Academic Research in Business and Social Sciences*, **2**(7), 323-332.
- Gardner, Burleigh B & Sidney J Levy, (1955), “The Product and The Brand”, *Harvard Business Review*, **33**(2), 33-39.
- Grewal et al, (1998), “The Effects of Wait Expectations and Store Atmosphere Evaluations on Patronage Intentions on Service-Intensive Retail Store”, *Journal of Retailing*, **79**, Elsevier, 259-268.
- Gulas, C. S. & Peter, H. B. (1995), “Right under Our Noses: Ambient Scent and Consumer Responses”, *Journal of Business and Psychology*, **10**(1), Springer, 87-98.
- Halim, W. Z. W & Hamed, A.B. (2005), “Consumer Purchase Intention at Traditional Restaurant and Fast Food Restaurant”, *University Utara Malaysia*.
- Hansen, R. & Deutscher, T. (1977), “An Empirical Investigation of Attribute Importance in Retail Store Selection”, *Journal of Retailing*, **53**(4), Elsevier, 59-72.
- Hendrick, N., Beverland, M. & Minahan, S. (2007), “An Exploration of Relational Customers’ Response to Service Failure”, *Journal of Service Marketing*, **21**(1), Emerald, 64-72.
- Howard, J. A. & Sheth, J. N. (1969), “The Theory of Buyer Behavior”, John Wiley and Sons, Inc.
- Kotler, P & Keller, K.L, (2006), “Marketing Management 12th Ed”, Upper Saddle River, Pearson.
- Kotler, P. (1973), Atmospherics as a Marketing Tool”, *Journal of Retailing*, **49**(4), Elsevier, 48-64.
- Kotler, P. (2002), “Country as Brand, Product and Beyond: A Place marketing and Brand management Perspective”, *Journal of Brand Management*, **9**, Palgrave, 249-261.
- Kraft, F. B. & Goodell, P. W. (1993), “Identifying the Health Conscious Consumer”, *Journal of Health Care Marketing*, **13** (3), Routledge- Taylor & Francis Group, 18-25.
- Lafferty, B. A. & Goldsmith, R. E. (1999), “Corporate Credibility’s Role in Consumers’ Attitudes and Purchase Intentions When a High Versus A Low Credibility Endorser Is Used in The Ad”, *Journal of Business Research*, **44**, Elsevier, 109-116.
- Levy, S. J. (1959), “Symbols for Sale” , *Harvard Business Review* (July-August), 117-124
- Lynch, J. L. and Ariely, D. (2000), “Wine Online: Search Costs Affect Competition on Price, Quality, and Distribution.” *Marketing Science*, **19**(1), Informs, 83-103.
- Martin, M. W. (1983), “Perception”, Allyn and Bacon, Inc.
- McCracken, G. (1989), “Who Is the Celebrity Endorser? Cultural Foundations of the Endorsement Process”, *Journal of Consumer Research*, **16**(3), 310-321.
- Noble, P.M & Gruca, T.S, (1999), “Industrial Pricing: Theory and Managerial Practice”, *Marketing Science*, **18**(3), Informs, 435-454.
- Pavlou, P. A. & David, G. (2004), “Building Effective Online Marketplaces with Institution-Based Trust”, *Information System Research*, **15**, Informs, 37-59.
- Pi et al, (2011), “Factors Influencing the Behavior of Online Group Buying in Taiwan”, *Journal of Business*

Management, **5**(16), 7120-7129.

Planet Retail, (2007), “7-Eleven Became the Largest Chain Store World Wide”.

Schiffman, L.G & Kanuk, L.L, (2000), “Consumer Behavior”, 8th Ed. NJ, Prentice Hall, Inc.

Scott, J, (1990), “A Matter of Record, Documentary Source in Social Research”, Cambridge: Polity Press.

Seock, Y, (2009), “Influence of Retail Store Environment Cues on Consumer Patronage Behavior across Different Retail Store Formats: An Empirical Analysis of U.S Hispanic Consumers”, *Journal of Retailing and Consumer Services*, **16**(5), Elsevier, 329-339.

Sirgy, M. J. (2013), “Self-concept in Consumer Behavior: A Critical Review”, *Journal of Consumer Research*, **9**, 287-300.

Usunier et al, (2009), “Ranking with ordered weighted pairwise classification”, Proceedings of the 26th International Conference on Machine Learning.

Wickliffe, V. P. & Pysarchik, D. T. (2001), “A Look at Product Attributes as Enhancers of Group Integration among US and Korean Consumers”, *International Journal of Retail and Distribution Management*, **29**, Emerald, 99-109.

Jerry, W. & Rangaswamy, A. (2001), “Customization: The Next Revolution in Mass Customization”, *Journal of Interactive Marketing*, **15**(1), Elsevier, 13-32.

Wu, K.W & Wu, K.C. (2011), “The Effect on Purchase Intention through the Dimensions of Brand Image and Brand of Origin”

Yalcin, M. & Kocamaz, T. (2003). “The effect of store atmosphere attributes on store loyalty intentions of hypermarket/supermarket customers.” **18**, 274-275.

Zeithaml et al, (1985), “Problems and Strategies in Services Marketing”, *Journal of Marketing*, **49**, 33-46.

Zeithaml, V. A. (1998), “Consumer Perceptions of Price, Quality and Value: A Means- Model and Synthesis of Evidence”, *Journal of Marketing*, **52**(3), 2-22.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

