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The Moderating Effect of Country of Origin on Athlete Brand Equity

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THE MODERATING EFFECT OF COUNTRY OF ORIGIN ON ATHLETE BRAND
EQUITY

BY

BO YU

THESIS

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Requirements for The Degree of
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THE MODERATING EFFECT OF COUNTRY OF ORIGIN ON ATHLETE BRAND

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ABSTRACT

Athlete endorsement industry continues to expand fast. Reports argued country of origin could be a cue to explain the endorsement gap among athletes from different nations. With the growing marketing potential in athlete brand, it is imperative to take country of origin as a cue to predict endorsement value. The conceptual model from Arai et al (2013; 2014) on athlete brand equity is adopted in this study.

This study adopts GDP per capita as the instrument to measure the market size of country of origin, and relies on data from Openhorse and Forbes on the Top 100 Highest-paid athletes in 2016. The study consists of a designed questionnaire with items from the scale of MABI (Arai, 2013). 23 HESS master students form panel of experts in this study, and are randomly assigned into 7 groups to evaluate on 15 randomly selected athletes.

Regression analysis is conducted to the collected data using SPSS 24.0. The results support the hypothesis that country of origin has moderating effect on athlete brand equity and endorsement value. This paper also finds that the importance of athlete performance is much higher than that of attractive appearance and marketable lifestyle to predict endorsement value when GDP per capita is higher.

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Chapter 1

Introduction

Athlete endorsement industry continues to expand fast. Top 100 highest-paid athletes raked in over \$924 million through endorsements from June, 2015 to June, 2016, according to Opendorse based on Forbes data (Weber, 2016). Athlete brand has become an effective marketing tool, whether athletes are associated with other brands as endorsers, forming a co-brand with certain companies, or developing own individual brands (Arai et al, 2014; Keller, 1993). Many firms sign famous athletes wishing to transfer the athletes' brand attributes, images, or attitudes to their brands (Gwinner, 1997). Under Armour's wise alliances with Stephen Curry and Jordan Spieth have certainly played an important part in its brand growth (Heitner, 2016). Some companies choose to collaborate with athletes to create co-designed brands. Nike not only co-branded with Michael Jordan for the Air Jordan sneakers, but also cooperated with Roger Federer for "RF" tennis shoes (Telegraph Sport, 2014). Furthermore, more and more athletes are building their own brands. Maria Sharapova launched her candy brand Sugarpova in 2012, and sold 1.3 million bags of candy in 2013 (Adams, 2014).

The rapid development in sports industry brings the athlete brands to the international stage. Taking tennis as an example, the Big Four in men's tennis— Roger Federer, Rafael Nadal, Novak Djokovic and Andy Murray all have their personalized websites with personal logos as the platforms for fans from all over the world to follow and purchase. According to Forbes (Weber, 2016), Djokovic's continuing on-court success gave him \$21.8 million for salary from 2015 to 2016, and gained him \$34 million from endorsement value. However, those two numbers did not match well if compared

with Federer's figures. Federer won \$7.8 million on court, and received \$60 million from endorsement deals. Some reports argued country of origin would be a cue in such differences, as Djokovic comes from Serbia (a poor country), and could not get support from a company from his country (Ahmed, 2016).

With the growing marketing potential in athlete brand, how to measure the brand equity of athlete brand is of great significance for both the endorsees and the athletes themselves. Endorsees expect to measure how great the athlete brand equity is to make an endorsement decision and offer a price to certain players. Athletes also pay much attention to their brand equity to make sure there are less drastic revenue declines when they lose games or retire. On the basis of the significance to measure athlete brand equity, this paper will focus on the research problem— how to predict athlete brand equity.

The apparent effect of country of origin on athlete brand equity is also considerable to predict athlete brand equity. If endorsees would like to invest on domestic athletes, they would consider the influence of those athlete brands in their country of origin. If endorsees would prefer to invest in a foreign market, they would choose athlete brands that could draw attentions in that market. With such considerations, this paper will emphasize on the effects of country of origin to predict athlete brand equity.

A great many studies in sports management literature have made contributions to this field and built up some models to conceptualize and measure athlete brand equity. Spry et al (2011) combined associative network memory model from cognitive psychology and brand signaling theory from information economics. Their study explained the relationship between endorser credibility and brand equity.

Based on the premise that intangible human brands have a brand personality just

like tangible brands (Carlson & Donovan, 2013), Carlson and Donovan (2013) formulated a Conceptual Model of Athlete Identification (MAI) to measure the brand personality of athletes, which was considered as the non-product-related attributes of brand association (Keller, 1993).

Based on the premise that product-related attributes are linked to desirable benefits for the consumer, Arai et al (2014) focused on product attributes to build up a Model of Athlete Brand Image (MABI), which suggests three dimensions (e.g. attractive appearance) of athlete brand image and ten sub dimensions (i.e. physical attributes). And a scale of athlete brand image was developed to assess the brand image dimensions of individual athletes (Arai et al, 2014).

Despite of contributions these studies made to the field, current research in athlete brand equity have some deficiencies. One major problem was that measurements in these studies had not taken into consideration of some prominent cues (e.g. country of origin) that may have effects on athlete brand equity. Studies stated country of origin has impact on brand equity (Yasin et al, 2007; Sanyal & Datta, 2011).

Another big concern in current literature is the research subject. Whether in financially based brand equity or in consumer based brand equity, the research subject should be the athletes. However, most studies in consumer based brand equity focused too much on consumers, and ignored the diversity of athletes. For instance, Arai et al (2013) only selected 17 athletes, and compared the consumer based brand equity among different consumers. Factors of different athletes which should be the real research subject are omitted.

Redundancy is another concern in previous literature. Although previous literature

had perfect conceptualization and operationalization of endorser credibility and customer-based brand equity (Spry et al, 2011) as well as brand personality (Carlson & Donovan, 2013), new models with similar concepts were building up. The three dimensions of MABI (Arai et al, 2014) are just quite similar of three dimensions of endorser credibility. What was more, when measured athlete brand personality, scales of wholesome, imaginative, successful, charming, and tough were created without testing of predictive validity (Carlson & Donovan, 2013). Some of the scales like successful and charming were doubted to be redundant as it was not easy for participants to distinguish these scales without guidance. The study also admitted its limitation of creating redundancy when measuring the success of athletes and their teams at the same time.

The biggest contribution of this research is the focus on research subject—athletes. Another importance of this study is to adopt country of origin as a moderator, which was omitted by previous literature to measure athlete brand image. It is of great importance for the research to adopt conceptual models from previous literature and related measurements to predict athlete brand equity, rather than simply building up its own model. What's more, the concentration of this research enlightens sports agencies or sports enterprises to follow the study here to estimate athlete brand equity before their endorsement decisions.

The theoretical framework of this paper was based on the two approaches to measure brand equity— financially based approach and customer based approach. The financially based approach aims to measure the financial market value of the brand (Farquhar et al., 1991; Simon and Sullivan, 1992; Keller, 1993; Kapferer, 2008). This study will adopt athlete endorsement value to represent the financially based athlete

brand equity.

Customer based approach origins from brand knowledge model, which conceptualized consumer-based brand equity as brand knowledge that comprised of brand image and brand awareness (Keller, 1993). This study will focus on brand image, and view athlete performance, attractive appearance, and marketable lifestyle as the independent variables of brand image. Brand awareness will be controlled in this study. And country of origin will be considered as a moderator.

This research does not formulate a new conceptual model to measure athlete brand equity, but adopts a scale model from previous literature and combine with some control variables that have effects but fore research omitted to predict athlete brand equity. Another purpose of this study is to focus on the research subject of athlete brand equity, and the moderating role of country of origin on athlete brand equity will be discussed. This research will also pay attention to the process how business estimate the brand image of athletes, and how customers psychologically measure athletes in reality.

Chapter 2

Literature Review

The literature review part first referred to the two basic brand equity measurement approaches— financially based and customer based— as an introduction to the literature. Then two notable models developed by Aaker (1991,1996) and Keller (1993) were introduced to give definitions to basic concepts within the literature of brand equity. Researchers in sports management field then turned to focus on athlete brand (Shank, 1999; Thompson, 2006; Arai, 2013). This study analyzed several concepts of brand in sports, human brand, athlete brand, finally gave a definition of athlete brand equity, and found the dependent variable. Three other models were further analyzed to find the independent variables of the study.

Conceptualization of Athlete Brand Equity

Brand Equity. Two approaches have been used to study brand equity. The financially based approach aims at estimating the value of a brand in terms of asset valuation (Farquhar et al., 1991; Simon and Sullivan, 1992; Keller, 1993; Kapferer, 2008). The customer-oriented approach aims at improving marketing productivity (Keller, 1993), focusing on the relationship between customers and the brand (Kapferer, 2008).

Two notable brand equity models were developed by Aaker (1991,1996) and Keller (1993). In Aaker's seminal brand equity framework, brand equity comprises five elements: (a) brand awareness, (b) perceived quality, (c) brand associations, (d) brand loyalty, and (e) other proprietary brand assets. Keller's (1993) consumer-based brand equity is based on the premise that the brand resides in the minds of individual consumers

as a cognitive construal (Heding, Knudtzen, & Bjerre, 2009) and focuses solely on the brand's relationship with its consumers (Batra, Myers, & Aaker, 1997). In Keller's conceptualization, consumer-based brand equity is "the differential effect of brand knowledge on consumer response to the marketing of the brand" (p. 2), and brand knowledge comprises brand awareness (e.g., brand awareness and recognition) and brand image (i.e., a set of associations linked with the brand's attributes, benefits, or attitudes toward it). As such, consumers' familiarity and knowledge of a brand in terms of favorability, strength, and uniqueness determine a brand's equity.

Brand. Brand equity was the focus of both two models that were introduced. To define brand equity, the definition of brand should be given first. A brand is a name, term, design, symbol or any other feature that identifies and distinguishes a good or service from others (Bennett, 1988). And Keller (2008) introduced brand as something that has actually created a certain amount of awareness, reputation, prominence in the market place.

Brand in Sport and Human Brand. Some researchers in sports management field turned to focus on sports, and defined brand in sport as a name, design, symbol, or other features that differentiates a sports product from the competition (Shank, 1999). Studies then managed to pay attention to human brand with the development of celebrity endorsement, and recognized human brand as any well-known persona who is the subject of marketing communications efforts (Thompson, 2006). As a result of research in human brand and brand in sport, researchers then focused on celebrities who were athletes and regarded them as athlete brands that has established their own symbolic meaning and value using their name, face or other brand elements in the market (Arai, 2013).

The basic concept of brand equity in marketing field is the added value of a brand name or logo contributes to a product or service (Aaker, 1991). However, some studies introduced the consumer-based brand equity as the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller, 1993).

Athlete Brand Equity. Studies provided evidence to the preference to adopt consumer-based brand equity in athlete brand equity. Erdogan (1999) introduced several models and their measurements to celebrity endorsement literature based on consumer's perceptions and attitudes towards the celebrity. A conceptual framework for spectator-based brand equity was introduced to measure sport brand equity (Ross, 2006).

Based on the previous analysis, this paper defined athlete brand equity as: the differential effect of consumer knowledge on consumer response to an athlete brand.

Country of origin, country of origin effects on brand equity. Previous literature provided evidence that the consideration of country of origin is important in the field of brand equity (). Both customers and businessmen would have a relative preference over domestic brands if the products are similar (Nagashima, 1970). The national pride most sports fans showed in big events like Olympic Games would agree with the significance of country of origin in their perception over a national team or a certain athlete. Nagashima (1970) defined country of origin image as the image created national characteristics, economic and political back-ground, history, and traditions. The conceptual framework for assessing the country-of-origin influence by Samiee (1994) regarded country of origin effect as the influence on the consumer's decision processes and purchase or relevant behaviors.

Brand Image, Brand Awareness and Endorsement Value. To study how to

predict athlete brand equity, both financially based brand equity and customer based brand equity should be discussed and measured. Brand image and brand awareness are two components of brand knowledge which is customer based brand equity (Keller, 1993). In the sports setting, brand awareness refers to the familiarity of the consumer with the athlete (Gladden et al, 1998). Arai et al (2014) understands brand image as the sport consumer's perception about athlete brand attributes. As a result, brand image and brand awareness should be two dimensions to measure in athlete brand equity. And financially based athlete brand equity could vary with its financial market value of the athlete (Farquhar et al., 1991; Simon and Sullivan, 1992; Keller, 1993; Kapferer, 2008). Figure 1 shows the antecedents and consequences of athlete brand equity in a sports setting. Consumers' perception of athlete brand equity leads to their brand loyalty and purchase behaviors. While for endorsees, the perception or estimation of athlete brand equity help them make the endorsement decision. Thus, the endorsement value of the athlete can represent financially based brand equity. To make a conclusion, athlete brand equity (brand image, brand awareness), and endorsement value are two dependent variables of the study.

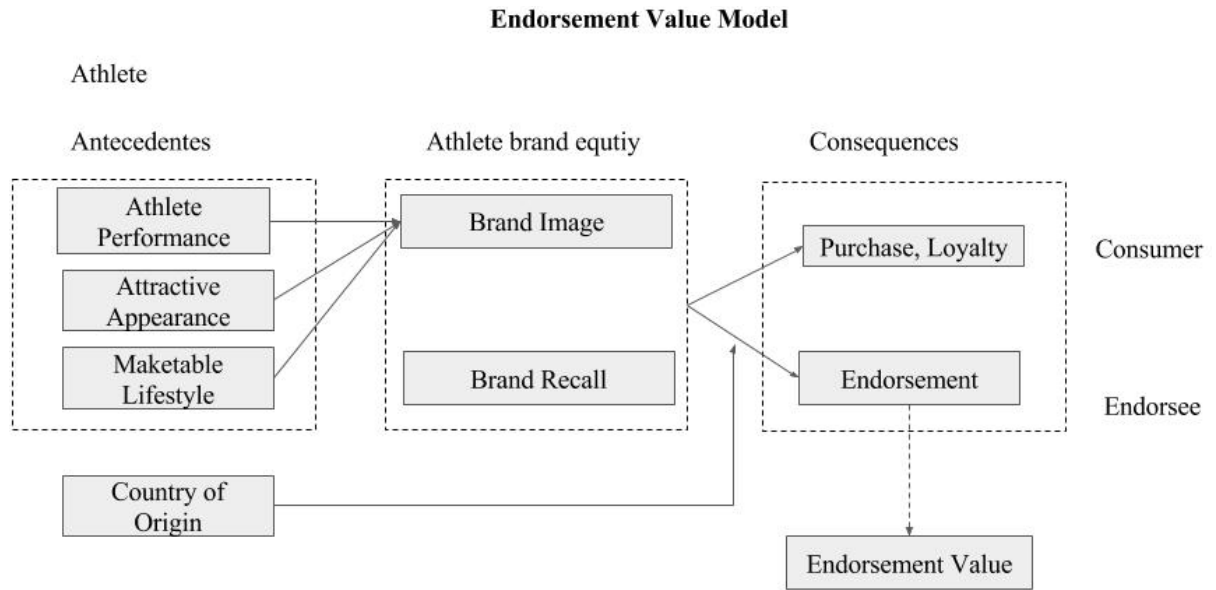


Figure 1 Endorsement Value Model

Measurement Models of Athlete Brand Equity

Both Aaker’s and Keller’s models have been the frequently adopted or adapted in sport brand equity and athlete endorsement research. Spry et al (2011) combined associative network memory model from cognitive psychology and brand signaling theory from information economics. Their study explained the relationship between endorser credibility and brand equity. Based on the premise that intangible human brands have a brand personality just like tangible brands (Carlson & Donovan, 2013), Carlson and Donovan (2013) formulated a Conceptual Model of Athlete Identification (MAI) to measure the brand personality of athletes, which is considered as the non-product-related attributes of brand association (Keller, 1993). Based on the premise that product-related attributes are linked to desirable benefits for the consumer, Arai et al (2014) focused on product attributes to build up a Model of Athlete Brand Image (MABI), which suggests three dimensions (e.g. attractive appearance) of athlete brand image and ten sub dimensions (i.e. physical attributes). And a scale of athlete brand image was developed to

assess the brand image dimensions of individual athletes (Arai et al, 2014)

According to Figure 2., brand image and brand awareness are two components of athlete brand equity. The scale of MABI gives enlightenment to the measurement of brand image. Thus, the conceptual model and measurement from Arai et al (2013; 2014) is preferred here. These previous studies primarily used a psychometric approach to evaluate consumer based athlete brand equity. The current study will utilize similar psychometric approach to measure consumer's attitude towards athlete brand.

Studies also stated that country of origin has impact on brand equity (Yasin et al, 2007; Sanyal & Datta, 2011). Yasin et al (2007) regarded country of origin as a cue that form beliefs which consumers utilize to evaluate about the brand equity of a product. Sanyal & Datta (2011) argued that country of origin has a significant influence on brand equity.

In these studies, psychometric approaches are also used to measure country of origin and athlete brand equity. The current study will adopt econometric approach to measure consumer's attitude towards athlete brand.

In the general analysis, the literature of athlete brand equity focuses on the three variables in MABI (Arai et al, 2013): athlete performance, attractive appearance, and marketable lifestyle. Carlson & Donovan (2013) used terms like brand personality and prestige, which could be regarded as a combination of athlete performance and attractive appearance; and distinctiveness was most likely to describe marketable lifestyle. Spry et al (2011) adopted expertise and trustworthiness to discuss athlete performance; and attractiveness was likely to be a combination of attractive appearance and marketable lifestyle. Thus, athlete performance, attractive appearance, and marketable lifestyle are

the three independent variables of the study. Country of origin is the moderator in this study.

Athlete Performance. Athlete Performance means the evaluation from customers on athlete performance on-court. Athlete expertise, competition style, sportsmanship and rivalry are four dimensions of performance (Arai et al, 2013). Athlete expertise refers to consumers' perception on the on-court performance of the athletes, and is a common variable in literature (Spry et al, 2011). Competition style focuses on the on-court playing style of the athlete. Carlson & Donovan (2013) used successful and tough to measure expertise and competition style. Rivalry is the perception on the competitions inside the sports league, and the competition that the athletes are facing. Sportsmanship discusses the evaluation of the ethical behaviors of athletes. Spry et al (2011) used trustworthiness, and Carlson & Donovan (2013) used prestige to measure the same variable.

Attractive appearance. Physical attractiveness means the physical favorability of customers towards the athletes. Attractive appearance, body fitness, and symbol are introduced as three items in attractiveness (Arai et al, 2013). Attractive appearance considers whether the athletes have good looking or not. Body fitness indicates whether the athlete's body matches with his or her sports or not. Symbol refers to an athlete attractive unique personal fashion style.

Marketable Lifestyle. Distinctiveness shows customers' perception on the uniqueness of the athlete's off-court life. Arai et al (2013) treated life story, role model and relationship effort as three items in marketable lifestyle. Life story is the story of the athlete off-court, and may reveal the athlete's personal value. Role model discusses the

society treats the athlete worth emulating. Relationship effort focuses on the positive attitude that the athlete interacts with fans, sponsors and media.

Country of Origin. Previous literature provided evidence that the consideration of country of origin is important in the field of athlete brand equity. Dichter (1962) was the first researcher to weigh the importance of country of origin in the field of marketing as he pointed out that nationalism would play a major role in advertising in international markets. Nagashima (1970) found that both customers and businessmen would have a relative preference over domestic brands if the products were similar. Consumer ethnocentrism would give explanation to customers' preference over endorsees from their country of origin than other nations (Chao et al, 2005). The national pride most sports fans showed in big events like Olympic Games would agree with the significance of country of origin in their perception over a national team or a certain athlete.

With the significant role of country of origin on athlete brand equity, a literature review of country of origin and the effect of country of origin would be imperative. Studies indicated that consumers would evaluate products and endorsees from their home countries more preferred than those from foreign countries (Nagashima, 1970; Chao et al, 2005). Han & Terpstra (1988) defined country of origin as the originated countries. Country of origin was also defined as the country where product or brand is located (Phau & Prendergast, 2000)

Bilkey & Nes (1982) argued the effect of country of origin had salient influence on the consumer's' evaluation on the products. Nagashima (1970) defined country of origin image as the image created national characteristics, economic and political background, history, and traditions. This paper would define country of origin of the

athlete as the country where the athlete was born.

Studies that adopted econometric methods to measure financially based brand equity all showed a preference to consider market size (Aaker, 1996; Simon & Sullivan, 1993; Ailawadi et al, 2003). Hsieh (2002) argued the economic affordability in consumption of consumers was heavily influenced by a country's economic development status, and she adopted market size to measure such status. The literature provided evidence that market size should be considered in the measurement of country of origin when measure financially based athlete brand equity.

Hypotheses

Based on the basic theoretical framework of this study, there are four hypotheses (demonstrated by Figure 2). While athlete endorsement value will be used to represent athlete brand equity, the direct relationship between athlete endorsement value and athlete brand equity should be tested. Thus, the first hypothesis is formulated:

H1: Customer based athlete brand equity has direct effects on athlete endorsement value.

Having tested the direct effects of athlete brand image on athlete endorsement value, some other variables that have direct effects on athlete brand image were controlled to test their relationship. And then other hypotheses are created:

H2: Country of origin (COO) has direct effects on the correlation of athlete brand equity (ABE) and athlete endorsement value (AEV).

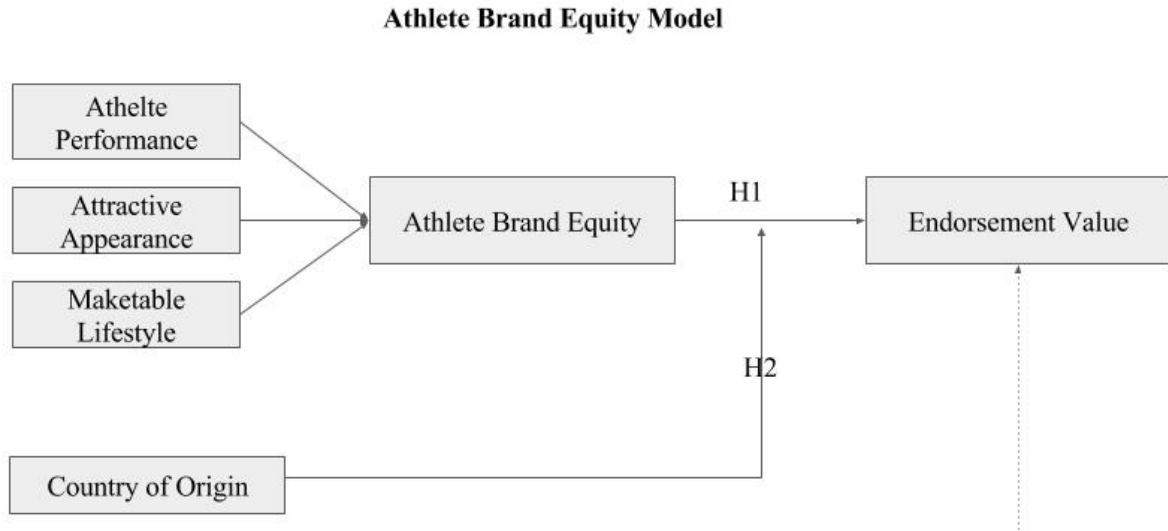


Figure 2 Athlete Brand Equity Model

Hypothesis 2 will test the moderating role of country of origin on the correlation between athlete brand equity and athlete endorsement value. Hypothesis 2 is used to test the effect of market size on the correlation between athlete brand equity and athlete endorsement value.

Summary

In previous literature of athlete brand equity, there was no accurate definition of athlete brand equity, thus this paper gave a definition that focused on consumers' perception on the brand image of an athlete. Under such definition and discussion of literature, this study recognized its two dependent variables— athlete brand equity (brand image and brand awareness) and endorsement value. With further analysis of three measurement models in athlete brand equity, the three independent variables— athlete performance, attractive appearance, marketable lifestyle, and one mediator— country of origin were discussed. This study also emphasized on self-brand connection and market size which had effects on the correlation of country of origin and athlete brand equity.

Chapter 3

Methodology

The population of this study is the sport customers in the United States. The sample of this research will adopt expert sampling, which is a convenience sampling method and choose 50 Sport Administration students from University of New Mexico (UNM) as its sample or panel of experts. The representative of this expert sample is not an issue, as Lynch (1982) argued that heterogeneity of homogeneous samples could enhance experimental predictions and reduce systematic violations of the theory. Considering the moderator of this study, the sample would be suitable with students from different countries of origins to participate in the study to make it more representative.

This study adopted the following five steps to conduct the research: (1) the athlete selection, (2) the item selection (3) the test-retest (4) main survey (5) the data analysis procedure.

Athletes Selection

This research will rely on data from Openhorse and Forbes on the *Top 100 Highest-paid Athletes in 2016* and will include all 100 athletes to its athlete pool. The data of Forbes only includes athletes active during the last 12 months from 2015-2016. “Forbes earnings figures include all salaries and bonuses earned between June 1, 2015 and June 1, 2016” (Weber, 2016). The endorsement value is an estimate of sponsorship deals, appearance fees and licensing income for the 12 months based on conversations with dozens of industry insiders.

Quantitative information of endorsement value, as well as quantitative information of country of origin (e.g. GDP, population, sport) will be gathered from the

data of the *Top 100 Highest-paid Athletes in 2016*.

Item Selection

The validity and reliability of Scale of Athlete Brand Image (Arai et al, 2014) had been tested in published literature, thus this study had directly applied this scale to measure athlete brand equity. Arai et al (2014) suggested that SABI consist of 30 items. The instruments of athlete performance are participants answers to their perception of the athlete's performance on the athletic expertise, competition style, sportsmanship and rivalry. The questions on physical attractiveness, symbol and body fitness will be asked to measure attractive appearance. Marketable lifestyle will be measured based on questions on life story, role model, and relationship effort. However, according to our research design, one expert group would have to evaluate on 15 athletes. If we would still have 30 questions, our survey would be a huge burden to the experts, which could influence their evaluation and could lead to problems in our results. To prevent this study from such problems, we decided to simplify the questionnaire. This study chose 10 out of 30 items of ten dimensions to form the new survey.

The ten items were originally selected because they had the highest correlation scores among 30 items from 10 sub dimensions of SABI. However, after discussions with three Sport Administration professors from a Southwestern university, this study found some of the items with top correlation scores had misleading words or phrases. Thus, this research invited the three Sport Administration professors to form a group of experts and choose 10 items from the items pool. The 10 items were as follows:

Table 1. Factors and items

Factor	Item
Athletic expertise	The athlete is a dominating player in his/her sport.
Competition style	The athlete's competition style is distinctive from other players.
Sportsmanship	The athlete shows respect for his/her opponents and other players.
Rivalry	The athlete does well against his/her major rival.
Physical attractiveness	The athlete is physically attractive.
Symbol	The athlete's private fashion is attractive.
Body fitness	The athlete's body fits to the sport.
Life story	The athlete has a dramatic personal life.
Role model	The athlete is good role model for others.
Relationship effort	The athlete is responsive to fans.

Main Survey

Survey Design. A questionnaire was designed for our main survey with 10 items on three independent variables that were discussed in the literature review. The questionnaire began with one sentence that suggested the basic information of one athlete including name, sport and country of origin.

The second part of the questionnaire came with one question on brand awareness. The experts were asked to give information of their familiarity of the athlete. Five-point Likert-type scale was adopted here, 1 represented that the experts had the most familiarity of the athlete. "5" means the participants have the least familiarity of the athlete. The experts were also asked to skip the questions and jump to the next athlete if they were not familiar with the athlete at all.

The third part of the questionnaire in this study focused on 10 items based on the independent variables introduced in the literature review. Seven-point Likert-type scale ranging from strongly disagree to strongly agree will be used to measure the answers of participants. Quantitative information on the moderator, and dependent variable will also be gathered with the instruments.

Panel of experts. Keller (1993) suggested that brand equity existed only when consumers were familiar with the brand. In consideration of such fact, we decided not to use normal college students, but a panel of experts who were quite familiar with athletes and sports. Another reason was we found that in our test and retest, the favorite athletes that the participants selected only occupied a relatively low percentage of the 100 athletes. Our panel experts consist of 23 HESS students. All the experts were randomly assigned into 7 groups. The representative of this expert sample was not a big issue, as Lynch (1982) argued that heterogeneity of homogeneous samples could enhance experimental predictions and reduce systematic violations of the theory.

Demographic Information of Panel of Experts. 14 (60.9%) of the experts were still or used to be collegiate athletes. Of the experts who recognized themselves as collegiate athletes, 84.6 % competed in baseball, basketball, football, and track, which were four sports from our athlete pool. 15 (65.2%) of the experts had working experiences in sport organizations. Only one of all the 23 experts was not an athlete or had not work in sport organizations.

12 (52.2%) of the experts strongly agreed that they were sport fans, 10 (43.5%) agreed and only one disagreed to be a sport fan. 21 (91.3%) of the experts had attended at least one sport event this year. 47.8 % of the experts would track sport news on TV, radio

and newspapers daily. 69.6% would check sport news via social media daily. 65.2% would talk with their friends about sports daily.

Data collection. Country of origin was measured by market size. GDP per capita was adopted here to measure the market size of each country. The data was from World Bank on *2015 GDP Per Capita* (World Bank, 2016). This survey chose one research design class, and invited all the students to participate in the survey as our panel of experts. The experts were then introduced about this study, and were randomly assigned into 7 groups. The groups would be required to discuss and provide their group scores of the survey questions of 15 randomly selected athletes.

Data Analysis

An empirical model will incorporate our controlled variables which have not yet discussed in sport management literature. The focal model to be estimated is:

$$AEV = \alpha + \beta \cdot x + u$$

where ABE is an athlete endorsement value. x is the vector of independent variables, including athlete performance, physical attractiveness and marketable lifestyle. α refers to the effects of country of origin, while u is the influence of athlete brand equity. The ABE will use data from Openhorse and Forbes on the *Top 100 Highest-paid Athletes in 2016*, as well as the psychological data gathered from the survey. Finally, regression analysis will be conducted using SPSS 24.0.

Chapter 4

Results

The collected data was first subjected and coded in SPSS 24.

Descriptive Analysis of Athletes

For this study, the target analysis sample is the top 100 paid athletes from Forbes list. Of all the 100 athletes, 98 percent are male, and 2 percent are female. 65 percent are from United States. The athletes are aged from 23 to 46. The average age is 31.38 years old. The majority age of the athletes is 28 years old (15%), 27, 29 and 31 (all 10%). 90 percent of the athletes are still active on court, 5 percent retired before June, 2016, and the other 5 percent are retired after June, 2016.

Figure 3 showed the athletes come from 23 different countries. The majority countries where the athletes come from are United States (65%).

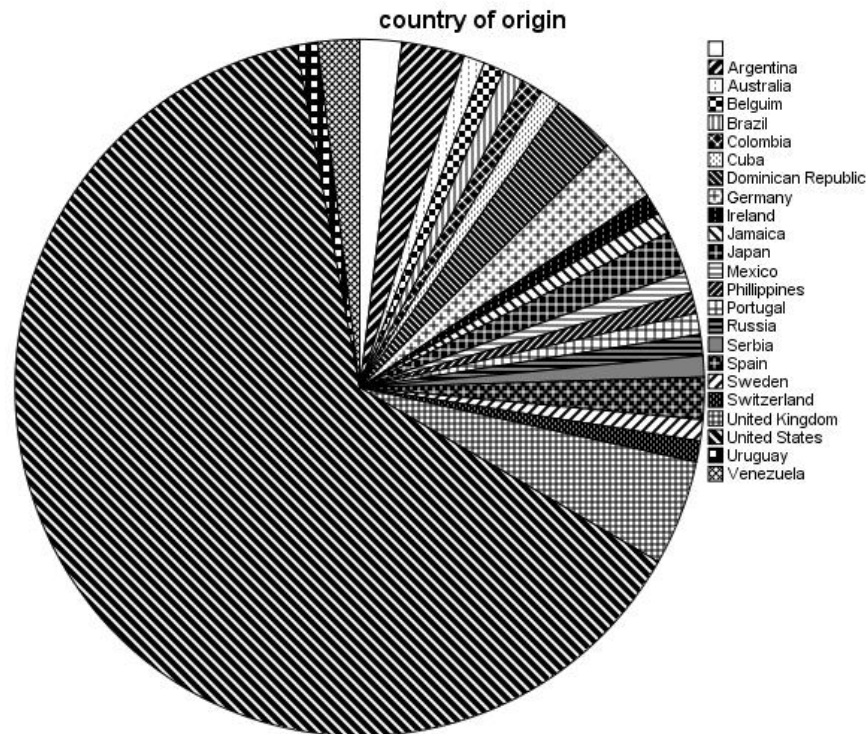


Figure 3. Percentage of Country of Origin of Athletes

The average population of these 23 nations in 2015 was 62,930,622. The country with lowest population in 2015 was Jamaica (2,793,335), the country that had the largest population was United States (321,418,820). The data on 2015 GDP from World Bank missed the value for Venezuela. The average GDP of these 23 nations was \$1,772,213,040,285 in 2015. The country with lowest GDP was Jamaica (\$14262190323), the highest was United States (\$18,036,648,000,000).

Figure 4 suggested the athletes come from 10 different sports. 26 percent are from baseball, 18 percent from basketball, 21 percent from football.

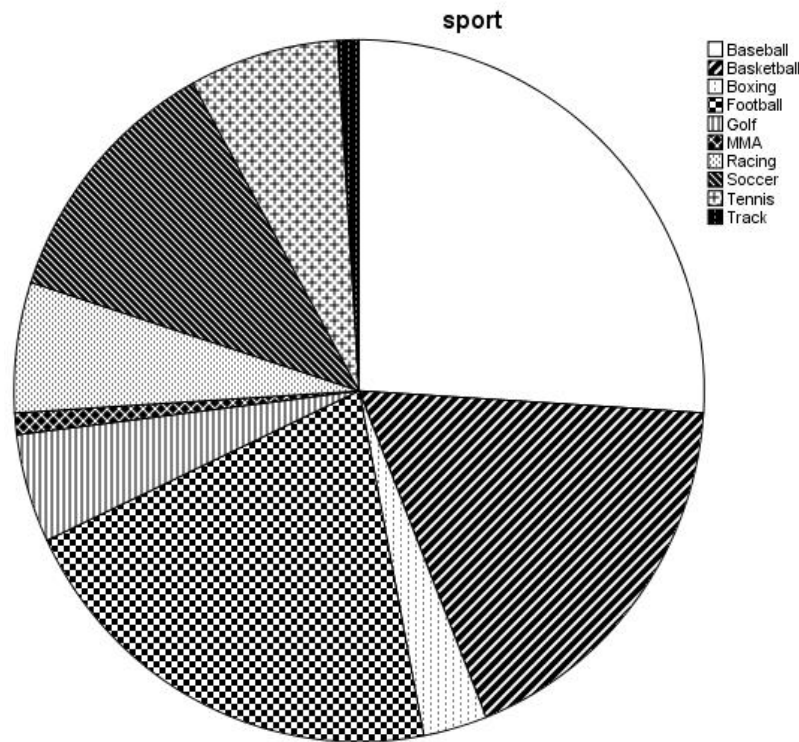


Figure 4. Percentage of Sport of Athletes

The average of the endorsement value of the 100 athletes is 9,240,600 dollars. The highest player Roger Federer earned \$60,000,000 via endorsement from June 2015 to June 2016. The lowest player in the list was Anthony Castonzo (\$35,000).

The panel of experts skipped 20 athletes (55% US, 45% Non-US) that they were

not familiar with at all.

Regression Analysis

As discussed in the methodology part, this study did multiple regression analyses to examine the relationship between endorsement value and various potential predictors. Table 2 showed the Pearson correlation coefficients results on endorse, sport, athlete performance, attractive appearance, marketable lifestyle, and GDP. Endorsement value was centered as $c_endorse$. $c_endorse = endorse/100,000$. GDP per capita was centered as c_gdppc , $c_gdppc = gdppc/10,000$.

Table 2. Correlations of Predictors and DV

	1	2	3	4	5	6
$c_endorse$	1.000					
c_gdppc	-.100	1.000				
per	.326	-.219	1.000			
app	.123	-.092	.280	1.000		
ls	.174	-.066	.187	.037	1.000	
sport	.426	-.391	.170	.066	-.110	1.000

The result showed that the correlation (.426) between sport and endorsement was significant at the 0.01 level (2-tailed). The correlation (.326) between athlete performance and endorsement was also significant at the 0.01 level (2-tailed). We also detected the correlation between athlete performance and attractive appearance (.280), the correlation between athlete performance and GDP per capita (-.219), and the correlation between sport and GDP (-.391).

We then tried to put endorse, sport, athlete performance, attractive appearance, marketable lifestyle, and GDP per capita in stepwise regression analysis. When sport entered as the predictor, the R score was .426, and when sport and athlete performance

combined as the predictors, the R score was .498. The change suggested that both sport and athlete performance were predictors for endorsement. The ANOVA analysis in both models suggested their p-value=.000 (< 0.05), which suggests that both the predicting variables of sport and athlete performance were significant.

Controlled regression. Since there was a significant model when athlete performance and sport combined together, and the way sport was coded suggested that sport was a control variable in our model. As a result, we controlled sport, and did our first controlled enter regression analysis on endorsement value, sport, athlete performance, attractive appearance, marketable lifestyle, and GDP per capita. Table 3-5 showed the results of this analysis. In step one, the R Square score was .634 when we controlled the model by sport. Then in step two athlete performance, attractive appearance, marketable lifestyle, and GDP per capita were entered as the predictors, the R Square score was .705. In the third step, we included GDP per capita as the moderator, the R Square score was .718. The ANOVA analysis in all the models suggested their p-value=.000 (< 0.05), which suggested that the predicting variables in each step were significant.

Table 3. Summary of Controlled Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
					Sig. F Change
1	.796	.634	.585	91.43150	.000
2	.840	.705	.645	84.63229	.008
3	.848	.718	.643	84.78105	.434

Table 4. ANOVA of Controlled Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	971628.962	9	107958.774	12.914	.000 ^b
	Residual	560101.237	67	8359.720		
	Total	1531730.199	76			
2	Regression	1080484.812	13	83114.216	11.604	.000 ^c
	Residual	451245.388	63	7162.625		
	Total	1531730.199	76			
3	Regression	1100460.636	16	68778.790	9.569	.000 ^d
	Residual	431269.564	60	7187.826		
	Total	1531730.199	76			

Table 5. Coefficients of Controlled Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.656	22.858		.466	.643
2	(Constant)	-370.681	106.233		-3.489	.001
	per	5.882	2.836	.157	2.074	.042
	app	.389	3.305	.009	.118	.907
	ls	15.832	5.844	.198	2.709	.009
	c_gdppc	11.423	7.358	.147	1.553	.126
3	(Constant)	-347.368	313.921		-1.107	.273
	per	-12.591	15.103	-.336	-.834	.408
	app	14.061	12.517	.326	1.123	.266
	ls	31.622	14.448	.395	2.189	.033
	c_gdppc	6.117	9.910	.078	.617	.539
	ls_coo	-7.517	5.969	-.225	-1.259	.213
	app_coo	-8.874	7.926	-.314	-1.120	.267
	per_coo	13.518	10.793	.495	1.252	.215

Table 5 showed the coefficients of the predictors in each step. In the second step, the Beta values of athlete performance and marketable lifestyle were higher than .150, which suggested that they were significant predictors. But the p values only showed marketable lifestyle was significant. In step three, we put GDP per capita as the moderator, and all the Beta values of the three variables suggested that they were

significant predictors. However, except marketable lifestyle, all the p values were all higher than .05, which questioned the statistical power of our data.

Regression on US Athletes. As discussed in the descriptive analysis of athletes, our sample had 65 athletes that were from United States, which might decrease the significance of GDP per capita in our regression model, because 65 of the GDP per capita values were the same. To eliminate such problems, we decided to conduct two regressions on both US and non-US athletes separately. Table 6-8 showed the results of the regression analysis on US athletes. Since all the GDP values were the same for this group, we eliminated GDP per capita in the second step, and eliminated our third step. In step one of this regression, the R Square score was .623 when we controlled the model by sport. Then in step two, the R Square score was .662. The ANOVA analysis in both the models suggested their p-value=.000 (< 0.05).

Table 6. Model Summary of Regression on US Athletes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
	US = US (Selected)				Sig. F Change
1	.789	.623	.575	84.04994	.000
2	.814	.662	.593	82.26050	.183

Table 7. ANOVA of Regression on US Athletes

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	549325.963	6	91554.327	12.960	.000
	Residual	332026.441	47	7064.392		
	Total	881352.404	53			
2	Regression	583613.636	9	64845.960	9.583	.000
	Residual	297738.768	44	6766.790		
	Total	881352.404	53			

Table 8. Coefficients of Regression on US Athletes

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.208	24.263		.173	.863
2	(Constant)	-129.609	117.106		-1.107	.274
	per	5.975	3.063	.185	1.951	.057
	app	-2.553	3.913	-.065	-.652	.518
	ls	4.182	7.513	.053	.557	.581

The coefficients of the predictors were presented in Table 8. In the second step, only the Beta value of athlete performance was higher than .150. Although the p-value was .057, it was much closer to .015 than in the controlled regression.

Regression on Non-US Athletes. We then did a regression on non-US athletes. Table 9-11 showed the results of the regression analysis on US athletes. In the first step one of this regression, the R Square score was .639 when we controlled the model by sport. Then in step two, the R Square score was .830 when we entered the predictors. Then in step three, the R Square score was .914 when we entered the predictors. The ANOVA analysis suggested that the p-value in step one was .006, in step two the p-value =.003, in step three the p-value=.003 (< 0.05).

Table 9. Model Summary of Regression on Non-US Athletes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
	US = Non-US (Selected)				Sig. F Change
1	.800	.639	.504	111.32161	.006
2	.911	.830	.689	88.17531	.045
3	.956	.914	.790	72.34928	.091

Table 10. ANOVA of Regression on Non-US Athletes

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	351311.304	6	58551.884	4.725	.006
	Residual	198280.000	16	12392.500		
	Total	549591.304	22			
2	Regression	456292.680	10	45629.268	5.869	.003
	Residual	93298.624	12	7774.885		
	Total	549591.304	22			
3	Regression	502481.534	13	38652.426	7.384	.003
	Residual	47109.770	9	5234.419		
	Total	549591.304	22			

Table 11. Coefficients of Regression on Non-US Athletes

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30.000	55.661		.539	.597
2	(Constant)	-594.946	197.664		-3.010	.011
	per	7.870	8.082	.145	.974	.349
	app	1.784	8.279	.038	.215	.833
	ls	28.057	10.573	.373	2.654	.021
	c_gdppc	25.097	11.617	.337	2.160	.052
3	(Constant)	-23.062	335.023		-.069	.947
	per	-25.220	16.422	-.466	-1.536	.159
	app	24.559	14.585	.516	1.684	.127
	ls	21.553	14.538	.287	1.482	.172
	c_gdppc	2.479	14.889	.033	.166	.871
	ls_coo	7.919	12.160	.145	.651	.531
	app_coo	-26.841	13.521	-.504	-1.985	.078
	per_coo	40.487	16.890	.733	2.397	.040

The coefficients of the predictors were presented in Table 11. In the second step, only the Beta value of athlete performance was higher than .150. Although the p-value was .057, it was much closer to .05 than in the controlled regression. In the third step, all the predictors had the Beta values higher than .150, but the correlation score of athlete

performance was -.466. All moderated predictors had significant correlations. Except for the p-value of moderated marketable lifestyle, the other predictors were acceptable at their p-values.

Model Validity Test

Although the data power was questionable, we still got an acceptable regression model. To test the validity of this model, we did another regression on athlete salary with the model. Table 12 suggested that all the p-values of the predictors were higher than .05 on salary.

Table 12. Coefficients of Model Test

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	22931250.00	3413760.599		6.717	.000
2	(Constant)	4203837.648	17292618.23		.243	.809
	c_gdppc	503154.761	1197729.961	.062	.420	.676
	per	684786.139	461692.120	.177	1.483	.143
	app	-255567.205	537969.223	-.057	-.475	.636
	ls	462769.325	951211.560	.056	.487	.628
3	(Constant)	-51287328.15	50824678.27		-1.009	.317
	c_gdppc	925206.346	1604529.573	.115	.577	.566
	per	664417.645	2445240.337	.172	.272	.787
	app	2390295.896	2026532.474	.537	1.180	.243
	ls	1631970.661	2339092.517	.198	.698	.488
	ls_coo	-645389.816	966382.907	-.187	-.668	.507
	app_coo	-1840773.593	1283300.650	-.631	-1.434	.157
	per_coo	27067.700	1747358.851	.010	.015	.988

Chapter 5

Discussion

Summary

All our four regression analyses suggest that sport is a variable that needs to be controlled when we study on the correlations between three dimensions of athlete brand equity and endorsement value.

The controlled regression shows that when sport is controlled, athlete performance ($p\text{-value}=0.042 < 0.05$) is a significant predictor for athlete endorsement value. Marketable lifestyle ($p\text{-value}=0.042 < 0.05$) is also a significant predictor for athlete endorsement value, and when GDP per capita is entered as the moderator, the moderated marketable lifestyle is still a significant predictor.

Regression on US athletes suggests that when sport is controlled, athlete performance ($p\text{-value}=0.057$, close to 0.05) is a significant predictor of athlete endorsement value.

Regression on non-US athletes indicates that when sport is controlled, the effect of athlete performance is not significant, but once moderated by GDP per capita, the moderated athlete performance is a significant predictor ($p\text{-value}=0.040 < 0.05$). The effect of attractive appearance is not significant, but once moderated by GDP per capita, the moderated attractive appearance is a significant predictor ($p\text{-value}=0.078$, close to 0.05). The effect of marketable lifestyle ($p\text{-value}=0.021 < 0.05$) is significant, but the moderated marketable lifestyle is not significant.

The correlations of the three predictors on athlete endorsement value in the regression on non-US athletes have some interesting data. Before the enter of GDP per

capita as the moderator, the correlation score of marketable lifestyle is .373. However, once GDP per capita is added as a moderator of our regression model, the correlation score of attractive appearance changes to -.504. The negative score suggest that the moderated attractive appearance has negative effects on endorsement value. The correlation score of attractive appearance is .038, and once moderated by GDP per capita, the correlation score of marketable lifestyle changes to .145. It shows that the significance of marketable lifestyle decreases when the regression model is moderated by GDP per capita. In other words, if the athlete comes from country with a higher GDP per capita, the effects of attractive appearance and marketable lifestyle on endorsement value is less important. On the contrary, the importance of athlete performance increases as the correlation score of athlete performance changes from .145 to .733 after the consideration of country of origin as the moderator. To further elaborate, the importance of athlete performance is much higher than that of attractive appearance and marketable lifestyle to predict endorsement value when GDP per capita is higher.

The model test regression shows that all the p-values of the predictors are higher than 0.05 when they are put together to predict salary. This suggests that our regression model can not be applied to predict other variables (e.g. salary), which turns out to give strength to the validity and reliability of our model.

Theoretical Contribution

The biggest theoretical contribution of this study is the consideration of the moderating effects of country of origin in the field of athlete brand equity. Although studies (Nagashima, 1970; Chao et al, 2005) pointed out the importance of country of origin in the field of brand and consumer behavior, there is a lack of research that

considers country of origin in the field of athlete brand equity. This study adopts a regression model to test the correlations between the three dimensions of athlete brand equity and athlete endorsement value, and tests the moderation role that country of origin (GDP per capita) has on that correlation. Our results suggest that GDP per capita (country of origin) should be considered when associate athlete brand equity with athlete endorsement value.

Another contribution is the linkage between athlete brand equity and athlete endorsement value. Despite of the fact that literature suggested the financially based approach aims to measure the financial market value of the brand (Farquhar et al., 1991; Simon and Sullivan, 1992; Keller, 1993; Kapferer, 2008). However, there is little research that directly associate athlete brand equity with athlete endorsement value. To some extent, this study makes up this gap by adopting country of origin as the moderator that links athlete brand equity with athlete endorsement value. The effects of the three dimensions of athlete brand equity (athlete performance, attractive appearance and marketable lifestyle) on endorsement value are tested in this study.

The improvement in this research to the scale test of SABI (Arai et al, 2013) is the focus on athletes. Although Arai et al (2013) tested SABI with 400 participants, the real sample is 17 athletes. The sample of this study is 100 athletes, which suggests SABI can be adopted to larger samples.

Practical Contribution

This study enlightens sports agencies or sports enterprises to estimate the potential endorsement value of the athletes by collecting the brand equity scores of the athletes before endorsement decisions. As athlete performance and marketable lifestyle

are two significant predictors, sports marketers can focus on these two variables to predict endorsement value. This research also suggests that sports agencies or sports enterprises need to focus on the GDP per capita of the athletes' country of origin when considering endorsement decisions.

The moderating effect of country of origin contributes to some marketing strategies for athlete brands. Our results suggest that the higher the GDP per capita is, the less important the effects of attractive appearance and marketable lifestyle are, and the more significant the influence of athlete performance is to endorsement value. In other words, for athletes from countries that have higher GDP per capita values, the marketing strategies for athlete brands should focus on athlete performance. For athletes who come from nations that have lower GDP per capita values, the marketing mix should concentrate on attractive appearance and marketable lifestyle.

Limitations and Implications for Future Studies

First, this paper only considers the influence of the control variable sport. However, there are some other demographic variables like gender, marriage status, retirement status, ethnic that need be considered as control variables to guarantee the stability of this model. For future studies, the consideration of all potential control variables is imperative.

Second, the regression model needs to be tested with a larger sample. The sample of this study is 80 athletes. However, as athletes are the subjects that athlete brand equity and athlete endorsement value center on, future research should include a larger sample to increase the statistical power of the study. And our sample focuses on the top paid athletes, but future studies can consider middle or lower paid athletes, and compare to see

if there are some major differences.

Third, the regression model needs to be tested with a greater female athlete sample. We only have two female athletes in our sample, however there might be some differences between male athletes and female athletes. Future research should consider gender as a control variable, and adopt more female athletes in sampling.

Fourth, the expertise of panel of experts needs to be strengthened. The experts that participates in this study are master students majoring in Sport Administration, Exercise Science and Health Education. However, future studies have to strengthen the expertise of panel of experts. They can find some true experts from sports media, professional sports, and sports industry.

References

- Aaker, D. A. (1995). Building strong brands. *Brandweek*, 36(37), 28.
- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38(3), 102–120.
- Adams, L. A. (2014). Brand Sugarpova: How Maria Sharapova became the world's highest-paid female athlete. Retrieved from <http://www.newsweek.com/2014/07/11/brand-sugarpova-how-maria-sharapova-became-worlds-highest-paid-female-athlete-256632.html>
- Ahmed, M. (2016). Roger Federer aces Novak Djokovic in the money game. Retrieved from <https://www.ft.com/content/85e9514a-3e10-11e6-8716-a4a71e8140b0>
- Ailawadi, K. L., Lehmann, D. R., & Neslin, S. A. (2003). Revenue premium as an outcome measure of brand equity. *Journal of Marketing*, 67(4), 1-17.
- Arai, A., Ko, Y. J., & Kaplanidou, K. (2013). Athlete brand image: Scale development and model test. *European Sport Management Quarterly*, 13(4), 383–403.
- Arai, A., Ko, Y. J., & Ross, S. (2014). Branding athletes: Exploration and conceptualization of athlete brand image. *Sport Management Review*, 17(2), 97–106.
- Bauer, H. H., Stokburger-Sauer, N. E., & Exler, S. (2008). Brand image and fan loyalty in professional team sport: A refined model and empirical assessment. *Journal of Sport Management*, 22(2), 205–226.
- Bilkey, W. J., & Nes, E. (1982). Country-of-origin effects on product evaluations. *Journal of International Business Studies*, 13(1), 89–99.

- Carlson, B. D., & Donovan, D. T. (2013). Human brands in sport: Athlete brand personality and identification. *Journal of Sport Management, 27*(3), 193–206.
- Chao, P., Wührer, G., & Werani, T. (2005). Celebrity and foreign brand name as moderators of country-of-origin effects. *International Journal of Advertising, 24*(2), 173–192.
- Dwivedi, A., Johnson, L. W., & McDonald, R. E. (2015). Celebrity endorsement, self-brand connection and consumer-based brand equity. *Journal of Product & Brand Management, 24*(5), 449–461.
- Dichter, E. (1962). The world customer. *International Executive, 4*(4), 25–27.
- Erdogan, B. Z. (1999). Celebrity endorsement: A literature review. *Journal of Marketing Management, 15*(4), 291–314.
- Farquhar, P.H., Han, J.Y. & Ijiri, Y. (1991). Recognizing and measuring brand assets. Marketing Science Institute, Cambridge, MA.
- Gladden, J. M., Mime, G. R., & Sutton, W. A. (1998). A conceptual framework for assessing brand equity in Division I college athletics. *Journal of Sport Management, 12*(1), 1.
- Gill, M. S., & Dawra, J. (2010). Evaluating Aaker's sources of brand equity and the mediating role of brand image. *Journal of Targeting, Measurement & Analysis for Marketing, 18*(3/4).
- Gwinner, K. (1997). A model of image creation and image transfer in event sponsorship. *International Marketing Review, 14*(2/3), 145.
- Han, C. M., & Terpstra, V. (1988). Country-of-origin effects for uni-national and bi-national products. *Journal of International Business Studies, 19*(2), 235–255.

- Heitner, D. (2016). Under Armour's Q2 financial results boosted by smart athlete endorsements. Retrieved from <http://www.forbes.com/sites/darrenheitner/2015/07/23/under-armours-q2-financial-results-boosted-by-smart-athlete-endorsements/>
- Hsieh, M. H. (2002). Identifying brand image dimensionality and measuring the degree of brand globalization: A cross-national study. *Journal of International Marketing, 10*(2), 46–67.
- Lynch, J. (1982). On the external validity of experiments in consumer research. *Journal of Consumer Research, 9*(3), 225-239.
- Nagashima, A. (1970). A comparison of Japanese and U. S. attitudes toward foreign products. *Journal of Marketing, 34*(1), 68–74.
- Phau, I., & Prendergast, G. (2000). Conceptualizing the country of origin of brand. *Journal of Marketing Communications, 6*(3), 159–170.
- Ross, S. (2006). A conceptual framework for understanding spectator-based brand equity. *Journal of Sport Management, 20*(1), 22.
- Samiee, S. (1994). Customer evaluation of products in a global market. *Journal of International Business Studies, 25*(3), 579–604.
- Sanyal, S. N., & Datta, S. K. (2011). The effect of country of origin on brand equity: an empirical study on generic drugs. *Journal of Product & Brand Management, 20*(2), 130–140.
- Simon, C.J. & Sullivan, M.W. (1992). A financial approach to estimating firm-level brand equity and measuring the impact of marketing events. Marketing Science Institute, Cambridge, MA.

Simon, C. J., & Sullivan, M. W. (1993). The measurement and determinants of brand equity: A financial approach. *Marketing science*, 12(1), 28-52.

Spry, A., Pappu, R., & Cornwell, T. B. (2011). Celebrity endorsement, brand credibility and brand equity. *European Journal of Marketing*, 45(6), 882–909.

Telegraph Sport. (2014). Roger Federer teams up with Michael Jordan to design new-look shoe and gives first airing at US Open 2014. Retrieved from <http://www.telegraph.co.uk/sport/tennis/rogerfederer/11058333/Roger-Federer-teams-up-with-Michael-Jordan-to-design-new-look-shoe-and-gives-first-airing-at-US-Open-2014.html>

Weber, S. (2016). Top 100 highest-paid athlete endorsers of 2016. Retrieved from <http://opendorse.com/blog/2016-highest-paid-athlete-endorsers/>

World Bank. (2016). 2015 GDP per capita. Retrieved from http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?year_high_desc=false

Yasin, N. M., Noor, M. N., & Mohamad. O. (2007). Does image of country-of-origin matter to brand equity? *Journal of Product & Brand Management*, 16(1), 38–48.