Examining Relationships of Social Media to Customer Equity of the National Basketball Association

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

EXAMINING RELATIONSHIPS OF SOCIAL MEDIA TO CUSTOMER EQUITY OF THE NATIONAL BASKETBALL ASSOCIATION

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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College of Natural and Health Sciences
School of Sport and Exercise Science
Sport Administration

August 2018
This Dissertation by: Jiyoung Park

Entitled: *Examining Relationships of Social Media to Customer Equity of the National Basketball Association*

has been approved as meeting requirement for the Degree of Doctor of Philosophy in the College of Natural Health and Sciences in School of Sport and Exercise Science, Program of Sport Administration

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ABSTRACT


The purpose of this study was to investigate the role Facebook plays in the sport management context, and to understand the relationship that exists between customer equity and social media, in a professional sport league in the U.S. While it is only one of many social media platforms, Facebook has over one billion users (Facebook, 2018) and it connects people with communities and similar interest groups such that it can enhance social relationships. Sport organizations should understand how social media can influence sport fans, and this can be examined by looking at the Facebook page of the National Basketball Association (NBA), which has more fans than the Facebook pages of any other professional sport leagues. A convenient sampling method was used in the current study. After data were collected, descriptive analysis, ANOVA, and multiple regression analysis were utilized. M-Turk was employed to allow for additional data to be collected between March 6, 2018 and March 17, 2018. A total of 276 survey responses were included in the dataset and analyzed.

With regard to customer equity, there was a significant difference between NBA Facebook page followers and non-followers, $F (1, 274) = 31.740, p < .001$. The results revealed that those who follow the NBA scored significantly higher on customer equity
than non-followers ($M = 3.20$). Further, those who follow the NBA Facebook page recognized higher relationship equity, brand equity, and value equity perspectives than non-followers. The results indicated that those who follow the NBA Facebook page scored significantly higher ($M = 3.54$) than non-followers ($M = 3.16$) on value equity. The result also revealed that there was a significant difference regarding brand equity between NBA Facebook page followers and non-followers ($\chi^2 (1) = 42.692, p < .001$), with a mean rank brand equity score of 161.73 for followers and 120.89 for non-followers. In addition, there was a significant difference regarding relationship equity between NBA Facebook page followers and non-followers ($\chi^2 (1) = 42.692, p < .001$), with a mean rank relationship equity score of 174.11 for followers and 111.51 for non-followers. Third, the findings revealed that customer equity drivers, such as brand equity, relationship equity, and value equity, affected the NBA’s customer equity. The analysis revealed that customer equity drivers significantly predicted the NBA’s customer equity. The results of the multiple regression analysis showed that the three customer equity drivers, including brand equity ($p < .001$), value equity ($p = .001$), and relationship equity ($p = .005$), significantly affected customer equity. Brand equity, value equity, and relationship equity accounted for 58% of the total variances in customer equity. The standardized coefficients revealed that each customer equity driver was a significant predictor, and brand equity ($\beta = .531$) was a stronger significant predictor of customer equity than value equity ($\beta = .216$) or relationship equity ($\beta = .211$).

The results of the current research can enhance relationships between consumers and sport organizations regarding the use of social media and the connections that exist between customer equity and social media in the sport management context. This study
contributes to the sport management context because it offers a consumer-based customer equity concept that can reflect consumers’ perceptions toward the NBA. For example, marketers will be able to understand how to evaluate their social media content based on fans’ level of engagement in social media activities and to promote more effective marketing strategies by utilizing different approaches for Facebook page followers and non-followers of the sport organizations or teams. The findings will also benefit sport marketers’ ability to communicate more effectively with consumers through social media. The marketers will be able to see social media as a valuable relationship marketing tool that can lead to positive economic outcomes for organizations and improve consumers’ perceived value of a sport organization.
ACKNOWLEDGEMENTS

This dissertation is dedicated to my wonderful family, without whose support, love, and encouragement, I would not have been able to persevere to see the endpoint of this dissertation. This dissertation is for you, my family.

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# TABLE OF CONTENTS

## CHAPTER

<table>
<thead>
<tr>
<th>I. INTRODUCTION</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Study Significance</td>
<td>6</td>
</tr>
<tr>
<td>Delimitations</td>
<td>8</td>
</tr>
<tr>
<td>Limitations</td>
<td>8</td>
</tr>
<tr>
<td>Definitions</td>
<td>9</td>
</tr>
</tbody>
</table>

## II. REVIEW OF LITERATURE

<table>
<thead>
<tr>
<th>Customer Equity</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Equity</td>
<td>15</td>
</tr>
<tr>
<td>Relationship Equity</td>
<td>17</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>20</td>
</tr>
<tr>
<td>Brand Equity in Sport</td>
<td>27</td>
</tr>
<tr>
<td>Fan Identification</td>
<td>32</td>
</tr>
<tr>
<td>Relationship Marketing</td>
<td>39</td>
</tr>
<tr>
<td>Relationship Marketing via Social Media</td>
<td>43</td>
</tr>
</tbody>
</table>

## III. METHODS

<table>
<thead>
<tr>
<th>Participants</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures</td>
<td>52</td>
</tr>
<tr>
<td>Survey Instrument</td>
<td>53</td>
</tr>
<tr>
<td>Social Media Efforts</td>
<td>53</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>54</td>
</tr>
<tr>
<td>Relationship Equity</td>
<td>54</td>
</tr>
<tr>
<td>Value Equity</td>
<td>55</td>
</tr>
<tr>
<td>Customer Equity</td>
<td>56</td>
</tr>
</tbody>
</table>
Demographic Information .......................................................... 56
Data Analysis .................................................................................. 56

IV. RESULTS ................................................................................. 58
Collecting Techniques .................................................................. 58
Descriptive Statistics .................................................................. 59
Reliability Measures for Each Factor ......................................... 64
Data Analysis of H1 and H2: ANOVA .................................... 65
ANOVA Assumptions ................................................................. 65
Hypothesis One ............................................................................ 66
Hypothesis Two .......................................................................... 67
Data Analysis of H3, H4, and H5: Multiple Regression .......... 69
Multiple Regression Assumptions ............................................ 69

V. DISCUSSION ........................................................................... 72
Hypothesis One ........................................................................... 72
Hypothesis Two .......................................................................... 75
Hypothesis Three ........................................................................ 80
Hypothesis Four .......................................................................... 83
Hypothesis Five .......................................................................... 85
Theoretical and Practical Implications .................................... 87
Future Directions .......................................................................... 90

REFERENCES ............................................................................... 93
APPENDICES ............................................................................... 119
A. Institutional Review Board Approval .................................. 119
B. Consent Form for Survey Participants ................................. 121
C. Survey Instrument ................................................................. 123
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Demographic Information of the Sample (Gender and Age)</td>
<td>59</td>
</tr>
<tr>
<td>2.</td>
<td>Demographic Information of the Sample (Ethnicity and Income)</td>
<td>61</td>
</tr>
<tr>
<td>3.</td>
<td>Demographic Information of the Sample (Interest of the NBA)</td>
<td>62</td>
</tr>
<tr>
<td>4.</td>
<td>Demographic Information of the Sample (Knowledge of the NBA)</td>
<td>62</td>
</tr>
<tr>
<td>5.</td>
<td>Demographic Information of the Followers</td>
<td>63</td>
</tr>
<tr>
<td>6.</td>
<td>Characteristics of the Followers</td>
<td>64</td>
</tr>
<tr>
<td>7.</td>
<td>Mean, Standard Deviations, and Cronbach’s Alpha</td>
<td>65</td>
</tr>
<tr>
<td>8.</td>
<td>Result of ANOVA (Customer Equity)</td>
<td>67</td>
</tr>
<tr>
<td>9.</td>
<td>Result of ANOVA (Value Equity)</td>
<td>67</td>
</tr>
<tr>
<td>10.</td>
<td>Result of Kruskal-Wallis (Relationship Equity)</td>
<td>68</td>
</tr>
<tr>
<td>11.</td>
<td>Result of Kruskal-Wallis (Brand Equity)</td>
<td>68</td>
</tr>
<tr>
<td>12.</td>
<td>Result of Multiple Regression</td>
<td>71</td>
</tr>
<tr>
<td>13.</td>
<td>Summary of Testing Results</td>
<td>71</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Brand Equity Model</td>
<td>22</td>
</tr>
<tr>
<td>2.</td>
<td>Customer-Based Brand Equity Model</td>
<td>24</td>
</tr>
<tr>
<td>3.</td>
<td>A Service Brand Equity Model</td>
<td>26</td>
</tr>
<tr>
<td>4.</td>
<td>Conceptual Framework of Brand Equity</td>
<td>29</td>
</tr>
<tr>
<td>5.</td>
<td>Spectator-Based Brand Equity Model</td>
<td>30</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

The sport industry has seen significant growth over the last three decades; however, sport organizations have struggled to keep up with fast-paced trends in the rapidly changing business field. Most sport organizations produce similar products and services (Berry, 2000), even though consumers have different needs and desires. It is important for sport marketers to satisfy customers’ various wants because customers prefer product and services they find most (Milne & McDonald, 1999). Therefore, understanding diverse customer wants and consumer behaviors is key for sport organizations to successfully develop effective marketing strategies and ultimately increase the organizations’ profits via customer satisfaction (Blattberg & Deighton, 1996). Consumers’ growing interests have caused researchers to seek out a cultural understanding regarding why each group of consumers is different and to explore the factors that are important to those customers. Among consumers’ characteristics that brands should consider, value is a vital factor that must be considered if brands are to build long-term relationships with their customers (Flint, Woodruff, & Gardial, 2002).

To fully understand customers’ values, the notion of customer equity, which is an important element in developing effective marketing strategies, has been widely used by researchers in the business industry. Customer equity is the sum total of all the value a company will ever realize from customers and is based on a firm’s products or services’ value; this equity is key to marketers whose aim is to increase future revenues (Lemon,
Rust, & Zeithaml, 2001). Traditionally, marketers focused on immediate values of marketing rather than long-term effects (Rust, Lemon, & Zeithaml, 2004); conversely, strategies that used customer equity considered marketing costs. Value equity, brand equity, and relationship equity comprise the three drivers of customer equity (Rust, Lemon, & Zeithaml, 2001). Value equity is the customer’s objective evaluation of a brand, based on brand awareness (Vogel, Evanschitzky, & Ramaseshan, 2008). Brand equity is the customer’s subjective evaluation of a brand (Lemon et al., 2001). Relationship equity is the customer’s tendency to adhere to a relationship with a brand once he or she has become involved with it (Vogel et al., 2008). Because the concept of customer equity is founded on building a better relationship with consumers (Martin, 2015), empirical research has explored the importance of customer equity based on customers’ lifetime values in the business context (Gupta et al., 2006).

Sport marketers have tried to understand sport fans’ behaviors, consumer patterns, and thoughts (Theodorakis, Wann, & Weaver, 2012) because in order to compete with other brands and sport leagues and thus enhance revenue generation, it is important for sport organizations to have strong relationships with their fans (Kim & Trail, 2010). To maximize profits, a substantial number of sport organizations have changed their marketing strategies from traditional product-oriented strategies to customer-oriented strategies. Further, in the context of sport management, it is important to build strong, long-term relationships with consumers who are primarily sport fans (McKelvey, 2012). As such, sport marketers began seeking more effective marketing methods, and consequently, they adopted a relationship marketing approach from the service-marketing field for broad use to enhance interactions with sport fans (Williams & Chinn, 2010).
Relationship marketing is an ongoing collaborative behavior between marketers and consumers (Sheth & Parvatiyar, 2000). The mutual relationship that exists between organizations and consumers helps organizations achieve the goal of relationship marketing by maximizing profits via sport fans who are highly involved with their favorite sport teams or organizations (Harris & Ogbonna, 2009). With regard to this, relationship marketing in the sport industry often involves fan loyalty and fan identification because it is important for sport organizations to have long-term relationships with fans (Funk & James, 2001). Hence, loyal fans have become key to sport organizations’ success in terms of generating more revenue (Bauer, Stokburger-Sauer, & Exler, 2008).

Another item that needs to be discussed in terms of fan identification and relationship marketing is social media. Scholars in the sport management field have focused primarily on how sport fans use social media and on identifying the functions of social media. However, a relatively few studies have been conducted on how sport organizations or teams utilize social media, especially as a marketing tool. Considering the wide-ranging use of social media and its two-way communication, research has demonstrated that social media could provide an ideal vehicle through which sport marketers could communicate with sport fans (Williams & Chinn, 2010), and this would essentially enable sport organizations to build long-term relationships with fans and consumers, which is the primary goal of relationship marketing.

Many sport organizations have used social media to build long-term relationships and enhance relationships with customers. As previously noted, traditional marketing approaches are no longer applicable in some fields. For example, traditional marketing
strategies could still be applied and used in manufacturing businesses, but they are not effective in service industries. The sport industry is a service industry in which a relationship marketing strategy can be effectively and widely used (Grönroos, 1990), so both sport organizations and sport consumers should take advantage of this approach. Similarly, a large number of professional sport teams in the United States have used social media to build strong relationships (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011) and to communicate with fans (Pedersen, Parks, Quarterman, & Thibault, 2010). Professional sport teams have used several social media platforms, such as Facebook, Twitter, and Instagram, to post information, pictures, and videos in order to connect with sport fans and consumers (Witkemper, Lim, & Waldburger, 2012).

Among professional sport leagues in the U.S., the National Basketball Association (NBA) has been most active in utilizing social media, which is known as relationship marketing. For example, the NBA has more followers, likes, and views in social media than other professional sport leagues in the U.S. (Wang & Zhou, 2015). As of May 2018, there were 34,886,797 Facebook users who liked and followed the official NBA Facebook page (https://www.facebook.com/nba), compared to 16,520,439 fans who supported the National Football League (NFL) Facebook page (https://www.facebook.com/NFL), 6,780,115 who followed the Major League Baseball (MLB) Facebook page (https://www.facebook.com/mlb), and 4,250,242 who followed the National Hockey League (NHL) Facebook page (https://www.facebook.com/NHL). This suggests that more NBA fans than fans of other professional sport leagues are apt to utilize the Facebook page to obtain information, follow news, and communicate with one another. Since social media has been one of the most useful vehicles by which sport
leagues improve their brands (Doran, Cooper, & Mihalik, 2015), sport marketers should understand what factors are important so as to engage NBA fans and teams via social media, and to examine fans’ behaviors in order to enhance NBA brands and teams.

Since most previous studies in the sport management field have addressed fan identification, relationship marketing, and social media separately, there is a lack of research on the relationship between fan identification and relationship marketing through social media. It has become essential for practitioners in the sport industry to grasp a comprehensive understanding of relationship marketing and related areas. Further, relatively few studies have analyzed the associations between social media and customer equity in the sport management context, as customer equity has typically been used to assess a company’s total value regarding future revenues in the marketing and business fields.

There is still a dearth of research focusing on the practical meanings that can be drawn from each sub-sector of customer equity for sport organizations and teams. More scholarly attention is needed to bridge the research gap in the sport management context. It is imperative for sport marketers to fully understand how to identify the specific elements of customer equity and to better comprehend customers’ perceptions of values. Further investigation on the potential relationship between social media use and customer equity will greatly advance the body of knowledge in sport management and marketing by applying a notion of customer equity to the context of the sport industry. In addition, the contribution will extend to practitioners in the sport industry who need an in-depth understanding of marketing and social media.
Purpose of the Study

Facebook had 1.45 billion daily users and 2.20 billion monthly users as of March 2018 (Facebook, 2018). Though it is only one among many social media platforms, Facebook has over one billion users and connects people with communities and similar interest groups that can serve to enhance social relationships; thus, many sport organizations have used this platform (Chang, Liu, & Shen, 2016). It is necessary for sport organizations to understand how social media influences sport fans through the NBA’s official Facebook page, which has more followers than another of professional sport league. The purpose of this research was to examine the role of social media and the relationship among customer equity drivers in the sport management context. Additionally, this study aimed to investigate the type of content that is attractive to NBA followers, and how social media affects NBA fans’ perceptions.

The following hypotheses were developed to fulfill the purpose of this research:

H1 Significant differences exist in the customer equity between followers and non-followers of the NBA Facebook page.

H2 Significant differences exist in the drivers of customer equity, such as brand equity, value equity, and relationship equity, between followers and non-followers of the NBA Facebook page.

H3 Brand equity has a significant influence on the customer equity of the NBA Facebook page followers.

H4 Value equity has a significant influence on the customer equity of the NBA Facebook page followers.

H5 Relationship equity has a significant influence on the customer equity of the NBA Facebook page followers.

Study Significance

From a practical standpoint, examining the relationship between social media and customer equity will be useful for sport marketers because although many sport
organizations have used social media to communicate with sport fans, little is known about the relationship that exists between social media and customer equity. Among the several types of social media platforms, Facebook is the most popular platform for sport fans to use in order to obtain information and interact with the other fans and teams (Schoenstedt & Reau, 2010). The purpose of this study was to investigate the role of Facebook in the sport management context and to understand the relationship between customer equity and social media in a professional sport league in the U.S. Once the relationships are identified, results of this study will contribute to increased awareness regarding the use of social media and the connections between customer equity and social media in the sport management context.

In addition, having a better understanding of the NBA’s social media use could be beneficial to help sport marketers and teams in other professional sport leagues in the U.S. interact with fans more effectively and efficiently. However, no study to date has extended the literature on the association between social media and the customer equity of sport organizations. As social media provides opportunities for marketers, it is important to understand what effects social media can have on organizations. The findings of this study will contribute to the body of knowledge on social media and customer equity and provide practical implications to the real sport industry world in terms of social media use and marketing. Thus, this current research will provide an opportunity to better understand the role of social media and how it may affect the overall equity of the sport organizations.
Delimitations

The delimitations of this study are associated with narrowing the scope of research and generalization of the results. First, this study focused on a single sport league, the NBA, because this league has used social media more effectively than any other professional sport league (Wang & Zhou, 2015). Although results of this study were useful in that they allowed for a deeper understanding regarding one professional league, they were not enough to generalize the study to other professional sport leagues. The second delimitation in the current research is that this study concentrated on one social media platform, Facebook. Among the many social media platforms, many sport organizations and professional teams have utilized Facebook more so than they have utilized any other social media platform, and this has to do with Facebook’s accessibility and wide distribution. Other social media platforms were not included in this study. With regard to the third delimitation, this study did not contain open-ended questions because this study attempted to examine relationships among several variables, thus a quantitative approach was desired. The current research included multiple-choice items only for the survey.

Limitations

As this research focused exclusively on the NBA, this limits its ability to generalize. Findings of this research may not be applicable to other professional sport leagues in the U.S due to the different levels of popularity of each sport league, the players, and teams, and other unique characteristics that each professional league may possess. Although the results of the current study are to some degree generalizable to NBA fans in general since the sample was similar to the target NBA fan population, this research is unable to generalize to all NBA fans.
Further, a convenience sampling method was used to find appropriate participants via M-Turk and snowball sampling; the participants were self-reported NBA fans. Although self-report is a prevalent method employed in marketing studies, it can be given to bias because each participant completes the survey alone (Achen, 2015). Convenience sampling can therefore affect the generalizability of the current research because it can reduce diversity of demographic and other characteristics of the participants. Specifically, the majority of the participants were Caucasians. Irrespective of those limitations, the result of the current research may provide a better understanding of the roles of social media for sport organizations and NBA fan characteristics.

Additionally, the present research was an extension of Hyun (2009b), who focused on the hospitality industry. There are many similarities between the hospitality industry and the sport industry, as both industries tend to stress or place emphasis on customer service and customer satisfaction. Future research is necessary, however, to create survey items regarding customer equity that focus exclusively on the sport industry.

**Definitions**

**Brand equity**: This represents an inclination of assets and liabilities associated with a brand name and symbol, which sums to or deducts from the value served by a product or service (Aaker, 1991). In the current study, a measure of brand equity will quantify a consumer’s perception regarding a brand provided by a product or service.

**Customer equity**: Customer equity is viewed as a market-based asset that can increase a company’s financial outcome and market valuation (Rust et al., 2001). In the current
study, a measure of customer equity will quantify an overall relationship value and marketing activity success of the NBA.

**Fan**: A fan represents a person that feels a psychological relationship with a team (Kwon & Armstrong, 2004).

**Fan identification**: This will refer to an individual’s level of psychological attachment to a certain sport team (Wann & Branscombe, 1993).

**Relationship equity**: Relationship equity is a customer’s inclination to continue buying a certain brand based on the objective and subjective assessment of that brand (Lemon et al., 2001). In the current study, a measure of the customer’s perception will be used to quantify a relationship provided by a product or service.

**Relationship marketing**: This is a process of two-way interaction between organizations and customers (Berry, 1983).

**Social media**: This will be viewed as a tool, platform, and avenue that enables people to interact and connect each other (Weinberg, 2009).

**Value equity**: Value equity is related to the customers’ objective evaluation for the brand (Rust et al., 2001). In the current study, a measure of a customer’s perception will be used to quantify the customer’s value toward a product or service.
CHAPTER II

REVIEW OF LITERATURE

Customer Equity

Over the past 40 years, many companies have shifted their marketing strategies to a customer-oriented concept, which affects the organizations’ long-term relationships with customers (Vavra, 1997). Customer equity is viewed as a market-based asset that can increase a company’s financial outcome and market valuation (Rust et al., 2001). Recently, customer equity has been spotlighted in many business fields because the term is linked to customer-level assessment of either a company or a product in terms of the product’s value and brand issues (Rust, Lemon, et al., 2004). Thus, to increase their value, corporations need to understand which factors affect customer behavior.

Customer equity has been defined as “the total of the discounted lifetime values summed over all of the firm’s current and potential customers” (Rust, Lemon, et al., 2004, p. 110), and is based on the value of a firm, which is a key element for marketers to increase future revenues (Lemon et al., 2001). This indicates that companies’ revenues are more likely to increase when customer equity increases; a firm with higher customer equity can get more money from its customers on average. Hence, the concept of brand equity, which focuses on a product-oriented approach, has been challenged by customer equity, which is customer-oriented (Blattberg & Deighton, 1996). Because all lifetime values of customers can be summated to a present value, customer equity is linked to the relationship between companies and customers (Lee et al., 2014).
There are three factors of customer equity: value equity, brand equity, and relationship equity (Rust et al., 2001). First, value equity is the customer’s objective evaluation of the utility of a brand, which is based on brand awareness. When customers are satisfied with products and/or services, they are aware of value equity. Quality, price, and convenience also impact value equity (Rust et al., 2000). Second, brand equity is the customer’s subjective evaluation of a brand (Lemon et al., 2001). As previously noted, brand equity adds value to either a product or service through a company’s marketing efforts (Keller, 1993). Third, relationship equity is a customer’s tendency to adhere to a relationship with a brand once he or she has become involved with it. In other words, it is expected that once a customer becomes loyal to a certain product or service, he or she is likely to remain loyal (Rust et al., 2000). Companies need to understand the value of relationship equity and make efforts to maintain or enhance it via methods such as implementing their own loyalty programs. If companies improve these three drivers, customer equity will increase on every level. Thus, it is essential that companies consider how each driver of customer equity can influence customer retention.

Based on these key drivers of customer equity, most previous research in this area has focused on the concept of customer equity in the field of business. There is an association between customer equity and relationship marketing. This connection can be improved by a firm’s customer relationship marketing programs, which might increase customer interactions (Leone et al., 2006). It has been suggested that, among the three customer equity drivers, value and brand equity could influence purchase intention (Kim & Ko, 2012).
Another aspect of customer equity is customer lifetime value. Customer lifetime value is related to a customer’s lifetime involvement with a firm and consists of four stages, including customer acquisition, customer retention, customer relationship expansion, and customer defection (Berger et al., 2006; Gupta et al., 2006; Kumar & Petersen, 2005; Rust, Zeithaml, & Lemon, 2004). Customer lifetime value and customer equity aim to measure customers’ lifetime financial value that consists of the current value and future value of the customers (Hyun, 2009b). Therefore, Hogan, Lemon, and Rust (2002) found customer equity and customer lifetime value of a company are highly related to a firm’s shareholder value.

In the past, customer equity was measured in terms of the various concepts of sales value (Dwyer, 1997; Rust et al., 2000; Sargeant, 2001). To better calculate customer equity, Rust et al. (2000) suggested a more appropriate formula. This formula is based on a company’s sales value because sales values are connected to a company’s shareholder value. However, there is a limitation of the existing research because a company’s marketers or managers are not able to understand the meaning of the figures of customer equity or create effective marketing plans for shareholders due to the complex structure of the customer equity formulas (Hyun, 2009b). As stated earlier in this chapter, customer equity is a primary element of a company’s long-term success, which is based on a marketing strategy (Gupta et al., 2006). Nevertheless, the previous customer equity research was not only unable to help organizations realize positive outcomes related to their marketing actions. Further, previous research was unable to investigate customer equity that is based on sales.
To make up for the weak points of the previous customer equity model, Hyun (2009b) developed a new instrument of customer equity. The new measurement of customer equity has been developed in the context of the hospitality business, which shares similar characteristics with the sport business due to the emphases on customer service and customers’ satisfaction. The concept of customer equity is useful for business managers who aim to understand the importance of shareholder value and relationship value in business (Hyun, 2009b).

The principle of customer equity is linked to customer value management, brand management, and relationship retention management (Zhang, Ko, & Kim, 2010). According to Bayón, Gutsche, and Bauer (2002), customer equity consists of four stages, including analysis, planning, implementation, and control. These stages include both direct and indirect drivers, where direct drivers carry over to companies’ consumer-generated profits. The indirect drivers influence customer equity as a consequence of their effect on the direct drivers, and they contain the antecedents of customer equity, such as value, brand, and relationship equity (Rust et al., 2001). Sweeney (2008) noted that sport teams should develop a customer-oriented marketing strategy to manage existing customers and increase new customers. Moreover, customer equity drivers and consumer behaviors have been integrated to suggest a conceptual model showing that brand and relationship equity serve as the drivers of customer equity and positively influence behavioral intentions at professional events (Yosida & Gordon, 2012). This finding has helped the sport management field understand the relationships that exist between brand equity and relationship equity and fans’ behavioral intentions.
The concept of customer equity helps marketers increase customer numbers and revenues by influencing consumers’ behaviors. Customer value that is driven by marketing efforts is salient for a customer’s relationship with an organization because it helps companies improve customer service and the value and/or desirability of the brand, create goodwill, and increase customers’ trust in the brand. For these reasons, research on customer equity has been conducted in various business contexts (Dwyer, 1997; Ramaseshan, Rabbane, & Hui, 2013; Rust et al., 2000; Sargeant, 2001; Wang, Kim, Ko, & Liu, 2016), such as the fashion industry (Kananukul, Jung, & Watchravesringkan, 2015; Kim & Ko, 2012; Lee et al., 2014; Sun & Ko, 2016), the telecom service industry (Segarra-Moliner & Moliner-Tena, 2016), the banking industry (Shahrok, Dehghan, & Nematizad, 2014), the service industry (Ou, Verhoef, & Wiesel, 2017), and the fast food industry (Nawaz, Ahmad, Piracha, & Raza, 2017). However, few studies have been conducted in the specific context of sport management (Liu et al., 2015; Yosida & Gordon, 2012; Zhang et al., 2010). Sport consumers not only have values that are distinct from general consumers, but they can also generate greater cash flow (Lachowetz, McDonald, Sutton, & Clark, 2001). Therefore, it is essential to explore how customer equity in the sport management field can be used to build a strong relationship with sport fans.

**Value Equity**

Value equity is one of the key drivers of customer equity that can improve a firm’s relationship with customers (Lemon et al., 2001; Wang et al., 2016). It has been defined as “the customers’ objective assessment of the utility of a brand, based on perceptions of what is given up for what is received” (Lemon et al., 2001, p. 2).
Customers are less likely motivated to purchase or re-purchase products when they perceive that they are paying for more than they are receiving (Richard & Jones, 2008). Similarly, customers can recognize value equity when it exceeds their anticipations or wants (Kim, 2015).

Quality, price, and convenience were identified as three drivers of value equity that can influence the customer-firm relationship (Lemon et al., 2001). First, quality is based on the firm’s actual product or service that can influence the value of the firm. Second, price is the amount of money required for the sale. Third, decreasing the customers’ costs and time represents convenience. Thus, in order for marketers to enhance perceived value for their customers, it is essential to improve product and/or service quality, provide proper prices, and find ways to save the customers’ time (Auty, 1992; Hyun, 2009a; Sheth, Mittal, & Newman, 1999). These three drivers of value equity play a significant role in a firm’s ability to achieve its marketing goals and long-term success (Lemon et al., 2001).

Based on the importance of value equity for sport context, and because spectator sport has continued to grow in the U.S. as a means of entertainment among consumers, Sweeney (2008) tried to examine value equity in spectator sport with a conceptualization of a value equity model. However, there are many entertainment providers or means of entertainment, such as movie theaters and video games, and this industry is perpetually competitive (Sweeney, 2008). To obtain competitive advantages over other providers, it is necessary for teams to attract, develop, and maintain connections with a great deal of customers (James, Kolbe, & Trail, 2002). To better understand customers, Sweeney’s (2008) conducted research based on Sheth et al. (1991), Rust et al. (2000), and Sweeney
and Soutar (2001), with regard to entertainment value, social value, service quality, perceived price, epistemic value, and satisfaction; these six factors are appropriate to a spectator sport environment. In addition, Sweeney (2008) noted that customer value is a crucial factor for sport organizations’ marketing strategies, and it will be effective and efficient for sport organizations to improve customer value and stakeholder value. In addition, this research improved and measured the psychometric characteristics of value equity in a sport context. However, using the framework, Sweeney (2008) tested value equity, which is a factor of the customer equity drivers, in a spectator sport context.

With regard to value equity, marketers need to pay attention to customers’ perceived product and service values because of the tremendous potential effect on purchasing behaviors, which is the ultimate goal of marketing. Pura (2005) supported this idea that consumers’ perceived values are associated with evaluating a firm’s present services. Thus, providing better services and products to customers often increases value equity (Rust et al., 2001).

**Relationship Equity**

While brand and value equity incorporate the meanings of products and customers’ perceptions, respectively, the notion of relationship equity is built upon the mutual association between customers and firms. Relationship equity is defined as “the tendency of the customer to stick with the brand, above and beyond the customer’s objective and subjective assessments of the brand” (Lemon et al., 2001, p. 2). Since the paradigm has shifted from a product to a customer-orientation in economics and marketing, maintaining or enhancing relationships with customers is as important as brand and value equity to attract customers (Lemon et al., 2001); this demonstrates how
critical relationship equity is to connect customers to the firms and enhance the relationships beyond brand and value equity (Richard & Jones, 2008). Due to the development of customer-based marketing and the importance of interactions with customers, relationship equity has been examined since it is easier to connect with existing customers than to attract new customers (Berry, 1995; Yoon & Oh, 2016). Some firms have tried giving something to customers such as rewards and incentives to increase the perceived value for customers, which may positively impact relationship equity (Rust, Lemon, et al., 2004).

Relationship equity was based in the literature of relationship marketing. According to Lyer, Sharma, and Bejou (2006), relationship marketing focuses on the relationships between organizations and customers to improve customer satisfaction and customer loyalty, which can encourage increases in organizations’ profits. Relationship equity is made up of the results of relationship marketing efforts because it can lead to relationships between organizations and consumers (Lyer et al., 2006). In sum, the goals associated with these two terms are to build strong and long-term relationships with customers. As stated earlier, relationship equity is associated with consumers’ evaluations that can lead to brand loyalty, as this relationship can maximize the possibility of future purchasing intentions (Lemon et al., 2001). In today’s competitive business fields, consumers have numerous opportunities to choose from among a plethora of services or products. Moreover, it is important for marketers and business managers to have strong brands, which can satisfy their consumers and enable them to build strong relationship with consumers (Rust, Lemon, et al., 2004).
For these reasons, many organizations have used loyalty programs, VIP services, special customer treatment, and reward programs for loyal or repeat customers (Yoon & Oh, 2016). Similarly, recognition and community programs often accomplish increased relationship equity for customers (Zhang et al., 2010). In addition, Rust et al. (2000) suggested affinity programs, community building programs, and loyalty programs aimed at building relationships with customers. To create a better loyalty program, Rust et al. (2001) noted two things that can affect customer equity. First, companies’ loyalty programs have to have more benefits than the benefits of the real cash value consumers received. Second, via the loyalty program, companies that aim to create strong relationships with customers have to provide high-quality benefits to encourage repurchase intention. In addition, Rust et al. (2000) suggested that affinity programs should seek to encourage emotional bonds between companies and consumers. In terms of customer community programs, the companies need to make an effort to improve consumers’ recognized costs associated with switching to competitors (Rust et al., 2000). Special treatment programs are connected with psychosocial reward programs, which focus on consumers who are uninterested in pecuniary rewards (Yoon & Oh, 2016). Accordingly, it is worthwhile to promote customer experiences with the company in order to reinforce the connection between customer community and the brand.

Similarly, relationship equity can build and enhance relationships between organizations and customers through various programs aimed at improving customer retention (Yoon, 2010). The importance of relationship equity may extend beyond customers’ subjective and objective evaluations (Rust et al., 2000). Whereas its significance has been well established in the business and marketing literature, a concept
of customer equity has not been fully applied to or examined in sport settings. It is important to incorporate some of the unique features of the sport industry when exploring customer equity.

**Brand Equity**

Organizations use brand equity to increase understanding of consumer purchasing intentions and product selection. Increased awareness of brand equity has caused many organizations to employ this concept to not only increase profits and customer awareness but to improve customer attitudes toward brands (Kim, Kim, & An, 2003). Because brand equity is related to customer expectations about product brands and services, it is necessary to understand customers’ needs and levels of satisfaction in order to increase the value of a brand’s assets (Ghodeswar, 2008; Keller, 2003). In addition, brand equity is related to ascending advertisement efficiency, consumer retention, and likelihood of extension (Aaker & Keller, 1990). Many studies have explored the effect of strong brand equity on increasing the perception of brands, including their names and symbols (Aaker, 1991; Keller, 1993; Keller & Lehmann, 2006).

Among the research on brand equity, Aaker (1991) contributed an important brand equity model to the marketing field that consisted of brand association, perceived quality, brand loyalty, and brand awareness. Brand equity was defined as “a set of assets (and liabilities) linked to a brand’s name and symbol that adds or subtracts to the value provided by a product or service to the firm and/or firm’s customers” (Aaker, 1996, p. 7). Brand association refers to the extent to which a certain brand is linked to the attributes of a general product category. This has the ability to enhance positive or negative associations to a product, brand, or service. Perceived quality is customers’ evaluations of
the overall superiority of products regarding their intended purposes, which is helpful for creating a perception of the brand, product, or service related to consumers’ product selection. Brand loyalty is the degree of customers’ commitments to a brand and preference over competitors, which is based on consumers’ satisfaction or needs. Finally, brand awareness is the extent to which customers can recall or recognize the brand; this influences the possibility that the customer will consume the brand. Each of these factors was found to increase marketing communication effectiveness and influence strong brand equity. In line with Aaker (1996), brand equity is connected to brand assets, including brand names and symbols. Brand equity is useful as a means of generating value for companies that is linked more to firm-based perceptions and customer-based perceptions. In addition, brand equity is the outcome of consumers’ reactions to the firms’ marketing activities (Anderson, 2007) because brand equity affects brand value by increasing consumers’ brand loyalty to products and services. While Aaker’s (1991) model was primarily developed to measure tangible products, it was not designed to measure intangible goods and services, which was one of the identified weaknesses of the model as it was not anticipated to measure a specific brand equity.
Figure 1. Brand Equity Model. Adapted from “Building Strong Brand Equity,” (Aaker, 1996).

Keller (1993) proposed a different model of brand equity to enhance the productivity of marketing efforts. According to Keller (1993), consumer-based brand equity is defined as “the differential effect of brand knowledge on consumers’ response to the marketing of the brand” (p. 2). This consumer-based brand equity (CBBE) model’s foundation is in brand knowledge, which consists of two factors: brand awareness and brand image. Brand awareness includes brand recognition and recall, and it shows the presence of a brand in the consumers’ minds. The second dimension is brand image,
which is based on the informational root in the minds of consumers; brand image includes a set of brand associations (types of brand associations, favorability of brand associations, strength of brand associations, and uniqueness of brand associations).

According to Keller (1993), consumer-based brand equity (CBBE) leads to a strong brand when consumers have high levels of recognition of and association with a brand. Keller (1993) contended that brand equity is a customer-based consequence that indicates how the consumers’ brand knowledge influences brand marketing. Brand equity can be considered an increased value based on consumers’ thoughts, emotions, and experiences, which are associated with a brand’s product or service (Lee, 2015).

Keller (1993) highlighted brand associations as an important part of brand equity because brand associations are the informational roots, which include the connection of the consumers’ minds to the brand (1998). For example, if consumers have positive brand associations in their minds, consumers have consumer-based brand equity perceptions (Keller, 1993). In addition, brand associations are considered to promote consumers’ decision-making (Low & Lamb, 2000). Similarly, brand awareness, which is another dimension of Keller’s (1993) CBBE model, influenced consumers’ decision-making because brand awareness is what allows the consumer to make brand associations. Additionally, marketers need to understand the importance of brand awareness because brand awareness can enhance the brand selection since consumers have a tendency to choose a brand familiar to them (Keller, 1993).
Keller’s CBBE model has been widely used in brand equity studies because its unique conceptualization is based on consumers’ perspectives regarding a product or service brand, which is an intangible asset (Bauer, Sauer, & Schmitt, 2004). The CBBE is able to boost market values and revenues (Keller, 1993) because customers have a tendency to purchase products or services based on the brand’s brand equity. In other words, brand equity improves customers’ perceived values of a brand, which consequently enhances the firm’s values as well. The CBBE can assist firms in better understanding how consumers perceive their marketing strategies. Therefore, CBBE is a key concept related to the perception of brand awareness and brand associations, which play a significant role in creating positive brand equity. It is important to increase brand equity and build knowledge in the consumers’ perceptions since solid brand equity is the
ultimate goal of the firms (Keller, 1993). Although Keller’s (1993) CBBE model could be applied to various fields to facilitate greater understanding of consumer perceptions, it is not applicable to brand equity that is financial in nature because it focuses on consumers’ perspectives.

After acknowledging this weakness in the previous model, Keller and Lehmann (2006) developed a brand equity model that was financial in nature; in this model, the financial value of a brand is related to the price, which then influences the financial assets of an organization. Similarly, Shocker and Weitz (1988) indicated that it is important to understand the financial approach to brand equity to increase cash flow through a brand’s name. However, brand equity that is rooted in an organization’s finances cannot encompass the entire concept of brand equity because this conception varies by customers and markets.

Berry (2000) developed a service-based brand equity model that relates to consumer-oriented packaged goods, including the presented brand, external brand communications, customer experience, brand awareness, brand meaning, and brand equity. This service-based brand equity model was developed to be different from those proposed by Aaker (1991) and Keller (1993). Berry (2000) utilized 14 brand companies that had high level performance based on service-based brand equity. The presented brand is a company’s identity grounded on controlled communication in service industries, which included advertising, service facilities, and the service providers’ appearance (Berry, 2000). External brand communications encompasses information consumers absorb about the company and service that is uncontrolled by the company including word-of-mouth communications and publicity. Brand meaning refers to
consumers’ predominant perspectives of the brand. Berry’s service-brand equity model is grounded on customers’ experiences to improve brand equity, and it suggests that brand awareness and brand meaning influence service-based brand equity. It was also noted that customers’ experiences with a company’s service are important because they are based on consumers’ psychological values, which influence a company’s brand equity (Berry, 2000). Therefore, it is necessary for marketers to distinguish between the goods and services concept of brand equity (Berry, 2000). In addition, service-based brand equity is focused on what consumers think of the brand the significance of consumers’ mindset to the brand because the overall brand image influences service-based brand equity. Thus, companies must strive to provide better consumer experiences. Marketers must understand how to build strong brand equity because, most of the studies in this area indicate that brand equity originates from the psychological and behavioral values of the brand (Hakala, Svensson, & Vincze, 2012). Consequently, it is important to understand brand equity to garner a differentiated effect from the brand’s marketing (Keller, 1993).

Figure 3. A Service Brand Equity Model. Adapted from “Cultivating Service Brand equity” (Berry, 2000)
Brand Equity in Sport

Many sport organizations have been interested in brand management since the early 2000s. Among the various concepts of brand management, brand equity is important for sport marketers because, per Aaker (1991), brand equity is “a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers” (p. 15). This concept helps sport marketers understand that brand value is connected to consumers (Keller & Lahmann, 2003). Many sport organizations and sport product brands have tried to enhance their brand equity because they know that it is essential to all organizations’ long-term success and the increase of customer equity, which can lead to strong and lucrative relationships with customers (Bauer, Stokburger-Sauer, & Exler, 2008; Peppers & Rogers, 2004). Thus, researchers have explored how to increase their brand equity in the field of sport management (Gladden, Milne, & Sutton, 1998; Ross, 2006; Ross, Russell, & Bang, 2008).

Aaker (1996) suggested a brand equity model to measure tangible property, which inspired the sport industry to build an appropriate model in the field of sport management. In the sport context, brand equity has become an important concept due to increasing competition among sport organizations. Successful brands can build strong emotional ties with their customers, which can enhance trust regarding purchasing intentions and brand loyalty (Aaker, 1996). Gladden et al. (1998) successfully applied the concept of brand equity to an intercollegiate context for the first time and suggested intercollegiate athletics as a useful brand equity evaluation tool. Gladden et al. (1998) explained, in their conceptual framework, that the antecedents of brand equity, including
team-related (team success, head coach, and star player), organization related (reputation and tradition, strength of conference and schedule, and the entertainment and delivery of the game itself), and market-related (geographic location, local media coverage, competitive forces, and local support) can affect its components (perceived quality, brand awareness, brand association, and brand loyalty), and they further stated that understanding brand equity can contribute to increased brand image, awareness, and revenues of sport teams. Additionally, these antecedents have influences a few consequences such as merchandise sales, national media exposure, individual donations, atmosphere, corporate support, and ticket sales. However, Gladden et al. (1998) had a weakness because the researcher’s instrument was not an actual measuring instrument.

Based upon the previous model, Gladden and Milne (1999) suggested a modified model that combined Aaker’s (1991) and Gladden et al.’s (1998) models for a professional sport league context. Gladden and Milne included two additional antecedents (logo design and stadium) and consequences (revenue) and suggested that the new model could be applied to all team sports for the purposes of examining brand equity.
Similarly, Ross (2006) proposed a spectator-based brand equity (SBBE) model, which included factors such as experience-induced (actual consumer experience), market-induced (word-of-mouth and publicity), and organization-induced (marketing mix). These three factors influence spectator-based brand equity components such as brand awareness and brand association. Ross’s model supplemented previous models (Aaker, 1991, 1996; Berry, 2000; Gladden & Milne, 1999; Gladden et al., 1998; Keller, 1993) to encompass two factors—brand awareness and brand associations, which built up the concept of sport brand equity. Ross’s (2006) spectator-based brand equity model was
based on Berry’s (2000) service brand equity model since spectator-based brand equity is linked to the customers’ service experiences. Since the previous brand equity model was focused on perceptions of manufactured goods (Aaker, 1996; Keller, 1993), it was not appropriate because of the invisible, inconstant, perishable, and experimental traits of the spectator sport field (Ross, 2008). Ross (2006) mentioned that the sport consumer’s experience is central for brand managers because of the distinguishing traits of spectator sport service settings. Thus, it can be said that Ross’s (2006) research contributed to literature regarding brand equity in sport in terms of how brand equity can be utilized in spectator sport settings and the importance of brand awareness and brand associations that played an important part in building up the brand equity.

Figure 5. Spectator-Based Brand Equity Model. Adapted from “A Conceptual Framework for Understanding Spectator-Based Brand Equity,” (Ross, 2006).

Ross et al. (2008) developed a brand equity model for sport that helps practitioners to recognize the characteristics of the sport service market, and they
suggested the Spectator-Based Brand Equity (SBBE) model to help practitioners understand sport brand equity in terms of consumer characteristics and to emphasize that sport managers need to increase psychological commitment to the sport brand as well. The SBBE model utilized 11 brand associations (non-player personnel, success, history, stadium, team characteristics, logo, concessions, socialization, rivalry, commitment, and organization attributes) and two means of brand awareness (identification and internalization). This SBBE model demonstrated that brand awareness and brand associations are salient factors for consumers’ evaluations and for purposes of selecting a sport service. Ross et al.’s (2008) research is helpful for managers to enhance and evaluate their brands’ strengths. Nonetheless, this research utilized only one professional sport sample, and it needs to apply the other sport environments.

In addition, Gordon (2010) developed a consumer-based brand equity model, which reflects Keller’s (2003) brand equity concept. Gordon’s (2010) brand equity model consists of five dimensions to brand equity, including brand awareness, brand associations, brand superiority, brand affect, and brand resonance. This study contributed to the literature of brand equity a deeper knowledge of how customers recognize goods and service brands. The findings of Gordon’s research were the first steps in utilizing Keller’s (2003) consumer-based brand equity concept.

As discussed above, most empirical research has concentrated on measurement in the sport context (Biscaia et al., 2013), and consumer-based brand equity is applied to sport teams’ management (Gladden & Funk, 2002). Due to its overall property value, which is based on consumer perception, brand equity in a sport context has been subject to extensive examination (Gladden & Milne, 1999; Ross, 2006; Ross et al., 2008). Sport
consumers’ subjective brand valuations of a sport team, which are led by non-tangible factors, including culture, atmosphere, and history, raise the possibility of their purchase intentions (Aaker, 1991; Gladden et al., 1998; Keller, 1993; Keller & Lehmann, 2003), psychological connections with a particular team (Kwon & Armstrong, 2004), and their loyalty (Bauer et al., 2008; Mills & Williams, 2016).

Unlike other consumers, sport consumers have strong emotional relationships and responses to sport products and sport teams (Mullin, Hardy, & Sutton, 2007). Brand equity is at the center of sport consumers’ minds (Raggio & Leone, 2007), which is why it is critical for sport marketers to improve their consumers’ positive brand associations and existing brand equity. In addition, from a practical standpoint, brand equity is a key component for sport organizations because the successful marketing of a product or service is often determined by its brand when compared to the same product or service (Keller, 1993).

**Fan Identification**

The notion of team identification was developed theoretically based on social identity theory, which is the part of an individual’s self-concept that originates from perceived membership in an associated social group (Tajfel, 1981). According to social identity theory, each person possesses a personal and social identity. Personal identity comprises unique attributes, while social identity includes group categories (Tajfel & Turner, 1986). Theoretically, social identity theory explains intergroup behavior and identifies group members to raise people’s collective self-esteem (Gau, Wann, & James, 2010). In addition, this theory illustrates that each individual wants higher self-esteem that can be achieved by pursuing a part in a social group (Tajfel & Turner, 1986).
In the sport management field, identification has played a leading role in encouraging sport fans to engage in repeated behaviors such as buying additional team-related merchandise (Trail, Fink, & Anderson, 2003). Trail, Anderson, and Fink (2000) stated, “Identification is an orientation of the self in regard to other objects including a person or group that results in feelings or sentiments of close attachment” (p. 165–166). Underwood, Bond, and Baer (2001) contended, however, that sport teams can create high levels of identification with customers, called team identification, where fans feel a psychological relationship with a team. Team identification was also identified as consumers’ levels of attachment or commitment to a certain sport team (Wann & Branscombe, 1993).

The concept of team identification has been widely used in the sport management field; however, there are variations in the terminology of team identification. Early, Wann and Branscombe (1993) defined team identification as the level to which an individual feels psychologically attached to a certain sport team. Later, other alternative terms were used, such as “fan identification” (Sutton, McDonald, Milne, & Cimperman, 1997), “team loyalty” (Wakefield & Sloan, 1995), and “psychological attachment” (Kwon & Armstrong, 2004). Despite many terms being used interchangeably, all of the terms were developed and used in association with psychological attachment, which was unidimensional and focused specifically on attachment to the team within the sport setting (Kwon, Trail, & Anderson, 2005). Most importantly, researchers found that both team identification and fan identification could affect sport consumer behaviors (Kwon & Armstrong, 2004; Wann & Branscombe, 1993).
As identification refers to a key concept in predicting fans’ consumption behaviors, previous studies found that a significant relationship exists between the level of fan identification and fans’ consumer behaviors (Gau, James, & Kim, 2009; Hunt, Bristol, & Bashaw, 1999; Kwon et al., 2007; Wann & Branscombe, 1993). According to Wann and Branscombe (1993), fan identification affected consumption behaviors of spectators, which was a vital predictor of cognitive, affective, and behavioral responses in the sport management context. For example, fans with high identification were more likely to attend more sporting events and to spend more money or time on their favorite team(s) by, for example, purchasing season tickets (Wann & Branscombe, 1993). On the other hand, low-identified fans were more likely to have no connections or a weak psychological interaction with a team (Funk & James, 2001) and were less likely to continuously support a team than fans who had a high level of fan identification (Hunt et al., 1999).

Other studies found that a significant relationship exists between fan identification and consumers’ purchasing of products (Hunt et al., 1999; Kwon et al., 2007; Trail, Robinson, Dick, & Gillentine, 2003). Hunt et al. (1999) discovered that there was a significant relationship between consumers’ purchases of team-licensed products and the level of team identification. Similarly, Trail et al. (2003) found that high-identified fans who identified with a certain team had a tendency to buy more team merchandise than low-identified fans or no-identified fans, and suggested that it was important for sport marketers to identify sport fans’ identity for the benefit of sport organizations (Heere & James, 2007a). Consistent with Hunt et al. (1999) and Trail et al. (2003), Kwon et al. (2007) also found that a significant relationship exists between team identification and
purchasing intention, which proved that consumer-perceived value could influence purchase intentions. In a more recent study, Gau et al. (2009) also demonstrated that high-identified fans were more likely to be motivated to attend sporting events, recognize better service quality, purchase team merchandise, and consume team-related media. Gau et al.’s (2009) finding proved that team identification was a key concept for sport marketers aiming to build long-term relationships with fans. Similarly, Gray and Wert-Gray (2012) found that team identification was closely associated with sport fans’ consumer behaviors including attendance and media consumption.

As previous literature suggests, it is no exaggeration to say that it is beneficial to know how consumers perceive and identify themselves as sport fans with sport teams or organizations. Sport organizations need to foresee consumers’ behaviors by identifying their needs and desires as they pertain to sport organizations. Therefore, many researchers are interested in team identification that has positive connections to diverse customer behaviors regarding sponsors (Madrigal, 2001), team-licensed merchandise purchase behavior (Kwon & Armstrong, 2002), and team brand association (Ross, James, & Vargas, 2006).

Another important aspect of team identification that has been discussed in the sport management field is measurement. Sport management researchers have developed different scales depending on the various contexts within the sport industry. In a pioneering study, Wann and Branscombe (1993) proposed a team identification scale called the Sport Spectator Identification Scale (SSIS). SSIS is related to psychometric attributes and has been widely used in business, marketing, psychological, and sociological fields (Theodorakis et al., 2012). Seven items are used to measure allegiance,
or team identification, by indicating options from one to eight. To determine the level of identification, the scores of all seven questions are summed. For example, scores over 35 indicate a high level of identification. Scores between 19 and 34 demonstrate a moderate level of identification, and scores below 18 suggest a low level of identification. However, this scale has a weakness in that it is unidimensional, meaning it cannot demonstrate what kind of factors influence a fan’s identification with a team. Noticing this limitation, scholars attempted to find alternative ways to measure team identification (Dimmock & Grove, 2006; Mahony, Madrigal, & Howard, 2000; Trail & James, 2001).

Mahony et al. (2000) proposed the Psychological Commitment to a Team (PCT) scale, which evaluates the strength of each person’s dedication to a sport team. The PCT scale can be utilized to explain the attitudinal and behavioral commitment of an individual to a certain sport team (Mahony et al., 2000). This scale uses 14 items and a 7-point Likert scale, with a high score representing a high psychological commitment to the team. In addition, Trail and James (2001) developed the Team Identification Index, but it had the same weakness as the SSIS in that it used a unidimensional index. Dimmock and Grove (2006) proposed the Team Identification Scale (TIS), which aims to measure three factors of team identification: cognitive-affective, personal evaluative, and perceived other evaluative. Cognitive-affective identification encompasses a person’s knowledge of his or her membership and the emotional importance of the membership. Personal evaluative identification is the extent to which one values a person’s team. Perceived other evaluative identification refers to a person’s view of how other people value a team. This scale includes strong psychometric attributes (Theodorakis et al., 2012).
In addition, Heere and James (2007b) developed the team identification scale for a multi-dimensional construct, which included six dimensions for individuals such as private evaluation, public evaluation, interconnection of self, sense of interdependence, behavioral involvement, and cognitive awareness. While Heere and James’s (2007b) scale could be applied to many contexts, and is especially useful for a multi-group setting, it is restricted to the measurement of one identity. Also, the behavioral involvement and private evaluation items were too similar to each other. In addition, Lock and Heere (2017) examined team identification based on past theoretical perspectives. Fan identification and team identification have been used interchangeably. Lock and Heere (2017) found that many scholars have employed the SSIS and TIS to gauge team identification levels because SSIS and TIS are similar in a number of ways. Further, a great deal of research has focused on the fan (role) and team (group) identity using quantitative measurements. However, improvements to these scales are needed with regard to measuring fan and team identity because of the discriminating relationship between role and group identity. It is necessary to discern between the concept of fan (role) and team (group) identification due to individuals’ multiple role identities. Therefore, it is important for scholars to compare fan (role) identity and team (group) identity for more precise measurement. This indicates that further study needs to be done to develop a more comprehensive scale to measure the level of fan identification.

Previous studies have identified the importance of team identification and various interrelationships with other core variables in consumer behavior in the context of sport management. Social media is another area that needs to be discussed in order to fully understand the relationships between fan identification and sport teams, players, and
organizations. According to Kaplan and Haenlein (2010), social media enables brands and organizations to interact with their customers in a cost-effective and efficient manner. Social media, such as Twitter and Facebook, can be useful tools to communicate with consumers and can facilitate meeting the needs of high-identified consumers (Richelieu & Pons, 2006).

In the sport context, sport organizations have utilized social media to satisfy high-identified fans as well (Wallace, Wilson, & Miloch, 2011). Real (2006) pointed out that high-identified fans were more likely to engage with sport-related sites and social media in order to support their teams. In addition, Smith, Smith, and Sanderson (2012) demonstrated that a relationship exists between the social media effect and team identification. High-identified fans were engaged in more social media consumption such as the use of a “hashtag” (Smith et al., 2012). Phua (2012) stated that sport fans’ use of social media correlated with fan identification level, self-esteem, and satisfaction with life. In addition, fans who had a high level of identification with a sport team were willing to participate in a sport team’s social media (Hambrick, Simmons, Greenhalgh, & Greenwell, 2010). Similarly, Sutton et al. (1997) found that high-identified fans may spend more time on media consumption such as reading the daily sports page and watching the news of their preferred or favorite teams. Hambrick et al. (2010) explained that social media could increase availability to team-associated information. On the other hand, Haugh and Watkins (2016) found that college-aged sport fans’ social media use was not related to the level of team identification since sport fans have a tendency to simply follow a sport. Therefore, social media has been considered a salient method through which brand managers and marketers fulfill consumers’ needs (Wallace et al.,
Furthermore, social media provides ideal platforms for consumers to interact with sport organizations’ brands (Walsh, Clavio, Lovell, & Blaszka, 2013).

In the sport management field, there is a substantial amount of research regarding team identification with consumer behaviors and team identification scales. The literature demonstrates that team identification is an important concept in understanding consumer behaviors and improves a sport team’s long-term relationship with sport fans. However, how sport marketers and organizations utilize the knowledge of fan identification and consumer behaviors in their marketing strategies has not been fully examined. More research is needed to examine how the entities in the sport industry effectively apply this information to their marketing plans. Among many marketing strategies, relationship marketing has been identified as one of the most effective and efficient marketing tools. While relationship marketing allows for the creation of strong relationships between organizations and consumers, in order for relationship marketing to be successful, it is important that marketers understand team identification due to its significant impact on consumer behaviors.

**Relationship Marketing**

The term “relationship marketing” was introduced by Berry (1983) to explain the process of two-way interaction between organizations and customers. Relationship marketing has influenced practitioners and academics in the business field, as the concept is focused on consolidating customers, suppliers, and partners with a company’s marketing efforts (Shani & Chalasani, 1992). Grönroos (2004) stated that relationship marketing was considered to be a paradigm shift when it first appeared in the mid-1990s, but it has become widely used and applied in various business fields. Business
organizations’ stakeholders are conscientious about building strong relationships with customers in order to increase profits and market shares, and they recognize the importance of developing appropriate marketing strategies (Morgan & Hunt, 1984; Shani & Chalasani, 1992). According to Gummesson (1999), it is essential to relationship marketing to include three main factors for the process regarding communication, relationships, and networking since relationship marketing strategies can be helpful in enhancing long-term relationships and creating personalized interactions with customers (Barnes, 2000; Pronschinske, Groza, & Walker, 2012). In addition, relationship marketing refers to all kinds of marketing efforts and strategies that are directly connected to the creation, expansion, and maintenance of successful relationship exchanges.

Similarly, relationship marketing has been defined as “the process of identifying and establishing, maintaining, and enhancing, and when necessary terminating relationships with customers and other stakeholders (Grönroos, 2004, p. 101). It is crucial that, via relationship marketing, organizations determine what consumers’ expectations or wants are and thus implement appropriate actions (Abeza, O’Reilly, & Reid, 2013; Grönroos, 1996; Williams & Chinn, 2010).

Thus, the primary goal of relationship marketing is to encourage strong and long-term relationships to develop between organizations and their customers in order to generate increased value for customers and increased profits for the organizations (Williams & Chinn, 2010). According to Lyer et al., (2006), the results of relationship marketing are linked to the literature regarding customer equity that suggests that relationship equity leads to enhance the connections between businesses and consumers.
In addition, researchers have classified the development of bonds in relationship marketing under three categories: financial, social, and structural (Berry, 1995; Liang & Wang, 2007). According to Bühler and Nufer (2010), these relationship bonds are typically initiated as financial bonds, and they then move on to become social bonds that become strongest when they are perceived as structural.

It is widely held that relationship marketing brings mutual benefits for both organizations and customers. For organizations, the benefits of relationship marketing often include greater customer retention, higher loyalty, lower marketing costs, and increased profits and stability (Berry, 1995; Bush, Underwood, & Sherrell, 2007; Grönroos, 1996; Kim & Trail, 2011). The benefits of relationship marketing for customers are derived from greater efficiency in choices, reduced searching costs, consistency in decision making, and minimal risks related to future choices due to familiarity (Bee & Kahle, 2006; Sheth & Parvatiyar, 1995a; Stavros & Westberg, 2009). There are also financial benefits associated with relationship marketing such as strengthening financial performance, maximizing profits, and decreasing associated costs (Buhler & Nufer, 2010; Gummesson, 1999).

Considering its potential benefits, relationship marketing needs to be better understood by sport organizations, since building a strong, long-term relationship with customers and fans is essential for success in the sport industry. Even though there is potential for benefits, relationship marketing is not easily implemented because it requires a long-term outlook, technology, and commitment (Stavros, Pope, & Winzar, 2008). Thus, it is essential to have a thorough understanding of the whole concept of relationship marketing in order to implement and apply it in a sport setting. Only a
limited number of studies have been conducted in the sport management field; however, these studies indicate that relationship marketing can be beneficial for sport organizations (Bee & Kahle, 2006; Kim & Trail, 2011). Bee and Kahle (2006) stated that sport teams, leagues, players, organizations, and fans tend to have relationships with one another based upon how effectively the organizations manage their interactions. Thus, the organizations should understand their customers’ wants and values, which are apt to change over time.

Relationship marketing enables sport marketers and organizations to communicate with fans and maintain or extend their respective fan bases (Bee & Kahle, 2006; Kim & Trail, 2011). Executing a relationship marketing method for sport organizations presents an opportunity to reinforce market share (Rosca, 2013). Bühler and Nufer (2010) claimed that relationship marketing is beneficial for sport marketers in terms of generating long-term relationships with customers, which can lead to lower marketing costs. Because of the benefits associate with relationship marketing, a number of sport organizations have begun to employ relationship-marketing strategies (Harris & Ogbonna, 2009; Lapio & Speter, 2000; Williams & Chinn, 2010). Moreover, Shani (1997) pointed out the usefulness of relationship marketing in the sport industry by focusing on the segmentation of consumers and markets. Sport fans are usually passionate and extremely loyal to a team or athlete, and relationship marketing plays a central role in accumulating brand loyalty that is highly associated with purchase of team-related products (Shani, 1997). Harris and Ogbonna (2009) and Lapio and Speter (2000) examined relationship marketing strategies used in different sport contexts (the English Premier League and NASCAR, respectively) and supported the notion that
relationship marketing can be effectively employed in the sport industry. In sum, the
benefits of relationship marketing are related to the creation of long-term relationships
between organizations and consumers (Peppers & Rogers, 2004).

**Relationship Marketing via Social Media**

As previous studies have suggested, relationship marketing has been highlighted
in the success of sport organizations, as it aims to retain customers via the establishment
and maintenance of long-term relationships. In order to establish, sustain, and enhance
relationships with fans and consumers, sport organizations should actively communicate
with them (Grönroos, 2004). Sport organizations need to adopt more effective
communication platforms, as communication is a fundamental element of any marketing
strategy (Williams & Chinn, 2010). According to Williams and Chinn (2010), among
various possible avenues, social media has promptly become one of the most effective
tools for two-way communication. Social media is often described as the tools, platforms,
and avenues that enable people to interact and connect to one another. Askool and Nakata
(2011) noted that social media performs a role in allowing organizations to provide
information and to communicate with consumers so as to establish trust and enhance
relationships.

Social media use is growing throughout the world. In recent years, in fact, social
media use has grown exponentially (Williams, 2011). Social media channels, including
Facebook and Twitter, enable customers to engage with sport teams and organizations
(Walsh et al., 2013). Marketers have taken this into consideration and are using social
media platforms, such as Twitter and Facebook, to provide content to consumers and
build relationships (Weinberg, 2009). Today, sport organizations understand the
importance of creating connections with fans in both online and off-line contexts. The use of social media as a marketing strategy has been highlighted theoretically in academia and in practice in the sport industry. In particular, sport organizations need to enhance their relationship marketing via social media, a technology to which previous traditional marketing efforts did not have access (Pronschinske et al., 2012). Generally, sport leagues and professional sport teams attempt to improve the relationships that exist between fans and the sport entities by using social media to share information and interact with fans (Kim & Trail, 2011). Via social media, sport fans can participate in conversations related to topics based on team activities, and they can show their devotion to their favorite teams (Williams & Chinn, 2010). Williams and Chinn (2010) proposed a conceptual model theoretically based on Grönroos’s (2004) relationship marketing model, which includes three key elements: communication, interaction, and value. Williams and Chinn (2010) discussed the different strategies for each avenue, including blogs, social networking sites, content communities, and bulletin boards, and they made recommendations to sport marketers with regard to how to achieve relationship marketing goals through social media.

Similarly, many sport organizations have been interested in brand management and have used social media in their relationship marketing. The effective use of social media in marketing efforts has prompted researchers to analyze a variety of issues related to social media. According to Williams and Chinn (2010), sport organizations seek to use social media to achieve their relationship marketing goals of building and enhancing customer loyalty. In this sense, sport marketers need to understand relationship marketing in order to provide proper marketing strategies aimed at sport fans, each of whom may
have his or her own individual reasons to purchase sport-related products. McDonald, Milne, and Hong (2002) showed that sport fans have wholly different motivations from other, general consumers for attending sport events and watching sport games, due in part to their different levels of involvement with a team or athlete. Egan (2004) argued that the mutual relationship between customers and teams is especially important in the sport industry because customers are loyal to teams regardless of any financial reward. By focusing on fans’ needs and desires, sport organizations can have more chances to develop customer loyalty, which contributes to improving fans’ satisfaction (Bühler & Nufer, 2010). In addition, sport organizations can improve their brand quality through social media (Jayson, 2013; Williams & Chinn, 2010) by providing opportunities for interaction with their fans (Fisher & Wakefield, 1998; Sanderson & Kassing, 2011). According to Pronschinske et al. (2012), sport organizations are able to increase fan engagement by using Facebook, and the authors suggested that professional sport teams need to post information and pictures on their Facebook pages in order to encourage fans to engage with the teams.

As social media can strengthen organizations’ core values and brands, many studies on the relationship between social media and brand management have been conducted (Bagozzi & Dholakia, 2006; Kaplan & Haenlein, 2011). Fans are likely to hope to communicate with the team they support through social media. Mahan (2011) also noted that sport teams are willing to interact with their fans, and this interaction could increase fan engagement. Therefore, sport organizations need to understand the significance of the social media effect on branding and marketing (Coyle, 2010).
Social media has been at the center of and thoroughly examined in various areas of sport management, marketing, and communication. Considering the huge growth in social media usage in the sport industry, however, relatively few studies have been conducted to examine the effects of social media on relationship marketing. To date, only a limited number of studies have investigated relationship marketing and social media in the field of sport management. Previous studies have indicated that sport organizations and teams are aware of the importance of relationship marketing and have focused on how sport managers and marketers perceive and use social media as a tool in relationship marketing in professional leagues (Abeza et al., 2013). In a study using content analysis, Kim, Trail, Woo, and Zhang (2011) found that all professional teams in various leagues in the U.S., such as Major League Baseball (MLB), the National Football League (NFL), the National Basketball Association (NBA), and the National Hockey League (NHL), use social media to communicate with fans, and they also provide a platform for customer-to-customer communication.

In a recent study, Achen (2016) examined the effectiveness of relationship marketing strategies for building relationships that are being used by professionals in the NBA. According to Achen (2016), Facebook is a useful tool for NBA teams to achieve the goals of relationship marketing. Also, NBA fans who are highly linked to their favorite NBA teams’ Facebook pages have been shown to rate the quality of the relationships they have with the team higher, and their link has also affected the consumers’ behavioral intentions as they pertain to the purchase of NBA tickets and merchandise. Inconsistent with Kim et al. (2011) and Williams and Chinn (2010), Achen (2016) discovered that social media is less likely to be used to build and maintain
relationships between organizations and customers than any other relationship marketing strategy, such as email, telephone, and employee interactions with customers.

Similarly focused on the professional sport organizations and teams, Abeza et al. (2013) qualitatively identified the current use of social media in relationship marketing and the opportunities and challenges it presents for managers in sport organizations. Overall, the authors are in support of Williams and Chinn’s (2010) discussion, as Abeza et al. (2013) identified the values and benefits of using social media to achieve the goals of relationship marketing, especially in a professional sport setting. In contexts similar to that of Achen (2016), Dick and Sack (2003) and Dick and Turner (2007) focused on marketing in the context of the NBA and discovered that the NBA teams were able to effectively evaluate and understand the importance of marketing tactics. Dick and Turner (2007) also discussed the importance of effective marketing strategies for the NBA teams and the need to understand the changes in markets so as to adopt and assess new marketing tactics to increase revenue.

Certainly, relationship marketing can provide sport organizations with an effective tool and a new perspective through which to establish long-term, trusting relationships with their fans. However, there is a still a dearth of research investigating the effective use of relationship marketing via social media, especially in a professional sport context. Furthermore, there is a lack of research regarding sport organizations and the means by which they can strengthen their social media strategies (Pronschinske et al., 2012). As social media provides tremendous opportunities for marketers, it is important to understand social media usage as it pertains to relationship marketing.
As the previous literature indicates, a great deal of research has focused on the use of social media in various areas of sport management and has examined the use of social media and relationship marketing, which enhances a strong and long-term relationship between sport organizations and their customers and fans. Marketers and many organizations utilize social media to communicate with their customers and to improve brands’ values and revenues, which is presented as customer equity. However, relatively few studies on customer equity and social media use have been applied to the sport management context. Although customer equity is salient for customers’ relationships with an organization, there is not enough research to understand sport fans’ customer equity and the consumer behaviors of those who feel psychologically attached to a certain team. As noted previously, sport fans possess different characteristics than general consumers; for example, they may be more inclined to engage in certain repeated behaviors such as buying more team merchandise. Therefore, it is imperative to examine the relationships that exist between social media use and customer equity by applying this notion of customer equity to the sport management field. To fill the research gap in the existing literature, this study explored the role of social media and the relationships among customer equity drivers in the sport management.

The following hypotheses were developed to fulfill the purpose of this research:

H1 Significant differences exist in the customer equity between followers and non-followers of the NBA Facebook page.

H2 Significant differences exist in the drivers of customer equity, such as brand equity, value equity, and relationship equity, between followers and non-followers of the NBA Facebook page.

H3 Brand equity has a significant influence on the customer equity of the NBA Facebook page followers.
H4 Value equity has a significant influence on the customer equity of the NBA Facebook page followers.

H5 Relationship equity has a significant influence on the customer equity of the NBA Facebook page followers.
CHAPTER III

METHODS

Based on the identified gap in the literature, this study aimed to explore relationships between social media use and customer equity drivers pertinent to the NBA. This study focused on the NBA because the sport organization’s official Facebook page has approximately 34 million followers (Facebook, 2018), which totals considerably more followers than those garnered by any of the other professional sport leagues in the U.S. A quantitative approach was deemed the most appropriate method to examine the relationships between social media use and customer equity drivers. For the current study, an Internet-based survey was constructed and was subsequently disseminated among NBA fans so that they could respond to the survey items.

This chapter consists of the following sections: Participants, Procedures, Survey Instrument, and Data Analysis.

Participants

Study participants were recruited after university Institutional Review Board (IRB) approval was obtained (Appendix A). Participants of the present study included sport fans of the professional basketball league in the U.S. Individuals who indicated interest in the NBA completed surveys. Data were collected in the spring of 2018, using both snowball sampling and convenience sampling techniques. Convenience sampling is a non-probability or non-random sampling method used to find the population of interest; it is useful to identify populations that can give the best perceptions on the topic or
interest at hand (Baltar & Brunet, 2011; Etikan, Musa, & Alkassim, 2015). This sampling technique makes it easy to access the population for the purposes of conducting research and collecting additional data (Dörnyei, 2007). Convenience sampling was used to conduct this research because the current study set out to recruit NBA fans interested in NBA games or teams. Snowball sampling, which is a particular type of convenience sampling method used to find hard-to-reach or hidden populations, was also used for this study (Biernachi & Waldorf, 1981).

To facilitate snowball sampling, the link for the survey was posted on the researcher’s Facebook page as a means of finding relevant participants interested in the topic at hand. Snowball sampling is useful to collect more data and decrease both costs and time (Benfield & Szlemko, 2006). Second, convenience sampling via Mechanical Turk (M-Turk) by Amazon.com was used, as it is an appropriate web source to collect data for online surveys (Johnson & Bordon, 2012). M-Turk is an online platform that offers various participant pools (Buhrmester, Kwang, & Gosling, 2011) and is a time-effective tool for researchers who need to collect additional data (Johnson & Bordon, 2012). Depending on the criteria, the researcher provided monetary compensation to those who participated in the survey. Through M-Turk, the researcher effectively recruited participants who are fans and followers of the NBA Facebook page.

All study participants answered questions about their social media experiences and usage patterns of the NBA Facebook page, and their opinions on the NBA’s brand, relationship, value, and customer equity. The current study recruited participants from a specific target population to measure the NBA’s social media efforts. A survey is a useful means by which to collect data from a given target population (Taylor-Powell &
Hermann, 2000). This research used an Internet-based survey because it was more flexible, interactive, and personal than an in-person survey (Luo, 2009).

**Procedures**

A convenience sampling method was used to obtain the data for this study. M-Turk, which Amazon.com operates, allowed the researcher to collect data from respondents who are NBA fans. The 15-minute online survey was created using Qualtrics and was distributed to participants via M-Turk.

To divide the participants into two groups, followers and non-followers of the NBA Facebook page, the survey asked participants if they followed or liked the NBA Facebook page. For this study’s purposes, Facebook was selected from among several popular social media platforms because adults in the United States use Facebook more frequently than they use any other social media platform (Duggan & Smith, 2013). Further, many sport organizations have used Facebook to interact with and build strong relationships with fans (Williams & Chin, 2010). More importantly, the Facebook page enables fans to continuously interact with the NBA, as the page frequently exposes fans to updates and content pertinent to the sport organization (Walsh et al., 2013). Additional items in the survey included questions regarding participant demographic information, social media account status, and reason(s) for following the NBA Facebook page. As such, this study used the NBA Facebook page to measure the relationship that exists between social media use and customer equity drivers such as value equity, relationship equity, and brand equity.
Survey Instrument

The survey included questions about participant experiences with the NBA, the NBA’s value, brand, relationship, and customer equity, whether participants follow the NBA Facebook page, participant usage patterns, and demographic questions regarding gender and age, and other demographic information. The survey instrument is included in Appendix C.

The researcher utilized inclusion and exclusion criteria to check participant qualifications. Prior to accessing the survey, potential respondents were asked one qualifying question to determine if they met the eligibility criteria for participating in the study; they were asked, “How interested are you in the NBA?” If participants responded by stating that they were interested in the NBA, they proceeded to the next question. If participants responded by stating that they were not interested in the NBA, they were directed to the end of the survey, and they were excluded from this study. In addition, in order to divide the sample into two groups, the researcher asked, “Have you followed the NBA Facebook page?” This question was used to distinguish any differences based on experiences regarding the NBA Facebook page. This question allowed the researcher to divide participants into two groups for comparison.

Social Media Efforts

This section of the survey measured the NBA Facebook page followers’ perceived effectiveness of the NBA’s social media efforts (10 items) on a five-point Likert scale (1=strongly disagree; 5=strongly agree). Items were obtained from Godey et al. (2016) and Kim and Ko (2012); the 10-item scale contained five social media effort sub scales: entertainment (2 items), interaction (3 items), trendiness (2 items),
customization (2 items), and word of mouth (1 item). The 10 items were evaluated with regard to the NBA’s social media efforts as assessed by the NBA Facebook page followers. These items enabled the researcher to assess the effectiveness of the NBA’s social media efforts. Example items included the following: “Using the NBA's Facebook page is fun,” “Content on the NBA's Facebook page is the newest information,” “I like to pass information on brand, product, or services from the NBA’s Facebook page to my friends,” and “The NBA’s Facebook page provides customized service.”

**Brand Equity**

Using a five-point Likert scale (1=strongly disagree; 5=strongly agree), 10 items from existing measures were used to assess the NBA’s brand equity. Following the criteria of Tong and Hawley (2009), Su and Tong (2015), and Aaker (1996), participants in the study responded to the 10 items based on four sub-dimensions: brand awareness (3 items), brand association (3 items), brand loyalty (2 items), and perceived quality (2 items). Example items included: “I would recommend the NBA brand to my friends” (brand loyalty); “Some characteristics of the NBA come to my mind quickly” (brand awareness); “The NBA has a very unique brand image, compared to competing brands” (brand association); and “Products from the NBA offer excellent features” (perceived quality). The possible score ranges were 1 to 5.

**Relationship Equity**

The relationship equity scale in this research was adopted from previous studies (Rust et al., 2000; Yoshida & Gordon, 2012). Three items were used to measure the NBA’s relationship equity. Each item was rated on a five-point Likert scale (1=strongly disagree; 5=strongly agree). The three statements were as follows: “The preferential
treatment I get from the NBA is important to me,” “I am satisfied with the relationship I have with the NBA,” and “I trust the quality of products from the NBA.” The possible score ranges were from 1 to 5.

**Value Equity**

The value equity scale was adopted from Rust et al. (2000) and Hyun (2009b). Four items were used to measure the NBA’s value equity. Each item was rated on a five-point Likert scale (1=strongly disagree; 5=strongly agree). The four statements included the following: “Generally, I think that the NBA offers good value for the money you spend,” “I think that the quality of the NBA is worth the cost,” “Compared to what I spend on the NBA, I think that I get a lot,” and “Overall, I think that the value of the sport entertainment I am receiving from the NBA is high.” The possible score ranges were from 1 to 5.

**Customer Equity**

The NBA’s customer equity was measured using six items from an existing scale developed by Hyun (2009b). Six items were modified to apply to the sport industry and were measured using a five-point Likert scale (1=strongly disagree; 5=strongly agree) based on three dimensions: word of mouth (2 items), motivation (2 items), and commitment (2 items). Example items included: “I would suggest the NBA league to my friends/relatives,” “The NBA’s league reputation encourages my interest,” and “I spend more money at an NBA game than any other sport league.” The possible score ranges were from 1 to 5.
Demographic Information

This research included demographic characteristics to describe the respondents. Items that asked about ethnicity, gender, age, and annual income were included. Examples are as follows: “What is your gender?,” “What is your age?,” “What is your ethnicity?,” and “What is your approximate annual income?”

Data Analysis

SPSS for Windows version 22 was used to analyze data for this study. Frequency statistics were used to identify socio-demographic information including gender, age, ethnicity, and level of education. In addition, descriptive analyses were used to show means and standard deviations. In this study, Cronbach’s alpha was used to check the reliability of scores on each scale. Cronbach’s alpha is generally used to measure scale reliability and consistency of scale construct (Field, 2005); alphas greater than .70 represent acceptable internal consistency (Nunnally & Bernstein, 1994). Further, to confirm the items, content validity was used to measure scale validity.

With regard to content validity, experts in the sport management industry confirmed instruments to ensure that they met instrument satisfaction (Carmines & Zeller, 1991). The survey was distributed to three doctoral students (two males and one female) and one professor (one male) in sport management at U.S. universities. The three doctoral students checked all items for readability. The professor checked all items, using the evaluation paper for readability, overlap, validity, and consistency. The professor made suggestions to the researcher about whether to add, modify, or delete items to ensure better content validity. Through this process, three items of brand equity were deleted to enhance validity, and one item of each value equity and relationship equity...
were modified for clarification. As a result, 46 items were included in the final version of the survey.

To test hypotheses one and two, a one-way analysis of variance (ANOVA) was used to identify brand, relationship, value, and customer equity differences between followers and non-followers of the NBA Facebook page. The assumptions of the ANOVA were checked (normality, and homogeneity of variances). For the current study, the researcher set the significance criterion alpha for each ANOVA at .05. Additionally, multiple regression analysis was used to explore the relationship between customer equity drivers and customer equity. For the multiple regression analysis, the assumptions are linearity, independence of errors, homoscedasticity, and normality of the residuals. For the current study, the researcher set the significance criteria alpha for the multiple regression analysis at .05. The multiple regression equation model is as follows:

Customer Equity = \beta_0 + \beta_1 \text{ Value equity} + \beta_2 \text{ Brand Equity} + \beta_3 \text{ Relationship Equity} + \varepsilon

(errors, \varepsilon, are normally distributed with mean 0 and variance \sigma^2)
CHAPTER IV

RESULTS

This chapter includes the demographic and data analysis results with regard to the NBA fans’ characteristics. The demographic information is reviewed first, followed by an explanation of the results of the hypotheses.

The hypotheses were: (H1) Significant differences exist in the customer equity between followers and non-followers of the NBA Facebook page., (2) Significant differences exist in the drivers of customer equity, such as brand equity, value equity, and relationship equity, between followers and non-followers of the NBA Facebook page., (3) Brand equity has a significant influence on the customer equity of the NBA Facebook page followers., (4) Value equity has a significant influence on the customer equity of the NBA Facebook page followers., and (5) Relationship equity has a significant influence on the customer equity of the NBA Facebook page followers.

Collecting Techniques

Two data collection techniques were employed to collect additional data: M-Turk and snowball sampling. Survey responses were collected via M-Turk from self-identified NBA fans between March 6th and 17th, 2018. The beginning of the survey presented an explanation of the purpose of the study so that prospective participants could determine their interest in participating in this research; the survey, which was administered via Qualtrics, required participants to provide their consent before starting the survey. Of the 316 survey responses that were received, 40 were excluded because of missing values or
incorrect forms, thus leaving 276 survey responses for analysis. The snowball sampling data \((n = 16)\) were excluded in the current study because the sample size was insufficient to compare the social media effect of the NBA on two groups. Thus, a total of 276 survey responses were included and analyzed.

**Descriptive Statistics**

Of the 276 respondents whose responses were analyzed, 68.5\% \((n = 189)\) were males, and 30.8\% \((n = 85)\) were females. Further, the largest participant age group included participants who were 24-29 years of age \((n = 95, 34.4\%)\), followed by 30-35 years \((n = 93, 33.7\%)\), 18-23 years \((n = 45, 16.3\%)\), 36-41 years \((n = 27, 9.8\%)\), 42-47 years \((n = 13, 4.7\%)\), and 48 years and above \((n = 3, 1.1\%)\) (Table 1).

Table 1

*Demographic information of the sample (Gender and Age) \((n=276)\)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>30.8</td>
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<tr>
<td>Male</td>
<td>189</td>
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<tr>
<td>Prefer not to respond</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>Age</td>
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<tr>
<td>18-23</td>
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<tr>
<td>24-29</td>
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<tr>
<td>30-35</td>
<td>93</td>
<td>33.7</td>
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<td>42-47</td>
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<td>4.7</td>
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<tr>
<td>48 and above</td>
<td>3</td>
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</tbody>
</table>
In terms of the ethnicity of the respondents, a majority of participants were Caucasian \((n = 188, 68.1\%)\), followed by Asian \((n = 36, 13.0\%)\), African American \((n = 25, 9.1\%)\), Hispanic or Latino \((n = 18, 6.5\%)\), two or more races \((n = 4, 1.5\%)\), Native American or American Indian \((n = 3, 1.1\%)\), and other \((n = 2, .7\%)\). The income of respondents was as follows: $25,000 to $49,999 \((n = 103, 37.3\%)\), $50,000 to $74,999 \((n = 70, 25.4\%)\), less than $24,999 \((n = 57, 20.7\%)\), $75,000 to $99,999 \((n = 40, 14.5\%)\), $100,000 to $124,999 \((n = 4, 1.4\%)\), and $125,000 or more \((n = 2, .7\%)\) (see Table 2).
Table 2

Demographic information of the sample (Ethnicity and Income) (n=276)

<table>
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<tr>
<td>African American</td>
<td>25</td>
<td>9.1</td>
</tr>
<tr>
<td>Native American or American Indian</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Asian</td>
<td>36</td>
<td>13.0</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $24,999</td>
<td>57</td>
<td>20.7</td>
</tr>
<tr>
<td>$25,000 to $49,999</td>
<td>103</td>
<td>37.3</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>70</td>
<td>25.4</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>40</td>
<td>14.5</td>
</tr>
<tr>
<td>$100,000 to $124,999</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>$125,000 or more</td>
<td>2</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Among the respondents, the majority 44.2% (n = 122) had a moderate amount interest in the NBA, followed by a great deal of interest in the NBA (30.4%; n = 84), neutral interest in the NBA (20.7%; n = 57), and a little interest in the NBA (4.7%; n = 13) (Table 3).
Table 3

Demographic information of the sample (Interest of the NBA) (n=276)

<table>
<thead>
<tr>
<th>Interest of the NBA</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A little</td>
<td>13</td>
<td>4.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>57</td>
<td>20.7</td>
</tr>
<tr>
<td>A moderate amount</td>
<td>122</td>
<td>44.2</td>
</tr>
<tr>
<td>A great deal</td>
<td>84</td>
<td>30.4</td>
</tr>
</tbody>
</table>

In addition, 45.7% of respondents reported they had a moderate amount knowledge of the NBA (n = 126), followed by 23.9% (n = 66) responding that they had neutral knowledge of the NBA, 17.7% (n = 49) a great deal of knowledge of the NBA, 12.3% (n = 34) a little knowledge of the NBA, and .4% (n = 1) no knowledge of the NBA (see Table 4).

Table 4

Demographic information of the sample (Knowledge of the NBA) (n=276)

<table>
<thead>
<tr>
<th>Knowledge of the NBA</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>A little</td>
<td>34</td>
<td>12.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>66</td>
<td>23.9</td>
</tr>
<tr>
<td>A moderate amount</td>
<td>126</td>
<td>45.7</td>
</tr>
<tr>
<td>A great deal</td>
<td>49</td>
<td>17.7</td>
</tr>
</tbody>
</table>

In terms of social media accounts, all participants indicated that they have used social media (n = 276, 100%). In addition, 43.1% (n = 119) of respondents followed the
NBA Facebook page, while 56.9% \((n = 157)\) were non-followers. Among the followers of the NBA Facebook page, 69.0% were male \((n = 82)\) and 31.0% were female \((n = 37)\) (Table 5).

Table 5

**Demographic information of the followers \((n=276)\)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBA Facebook Page</td>
<td>Followers</td>
<td>119</td>
<td>43.1</td>
</tr>
<tr>
<td></td>
<td>Non-followers</td>
<td>157</td>
<td>56.9</td>
</tr>
<tr>
<td>Followers</td>
<td>Female</td>
<td>37</td>
<td>31.0</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>82</td>
<td>69.0</td>
</tr>
</tbody>
</table>

Most respondents noted that they followed the NBA Facebook page for game highlights \((n = 36, 30.3\%)\); to obtain information \((n = 74, 62.2\%)\); for interviews with players and coaches \((n = 4, 3.4\%)\); for promotions, offers, or deals from the NBA \((n = 3, 2.5\%)\); or for day to day updates \((n = 2, 1.6\%)\).

Among the NBA Facebook page followers, 63\% \((n = 75)\) followed the NBA Facebook page for more than 1 year, 16\% \((n = 19)\) between 6-12 months, 10.9\% \((n = 13)\) between 3-6 months, and 10.1\% \((n = 12)\) between 1-3 months. In addition, the NBA followers viewed the NBA Facebook page 2-3 times a week \((n = 46, 38.7\%)\), followed by once a week \((n = 35, 29.4\%)\), 4-6 times a week \((n = 17, 14.3\%)\), daily \((n = 10, 8.4\%)\), 2-3 times per day \((n = 6, 5.0\%)\), and 4 or more times per day \((n = 5, 4.2\%)\).

With regard to gender and age, the participants in this study are considered representative of NBA fans, as Scarborough (2012) has noted that 69% of NBA fans were men aged 18-34 years of age (Table 6).
### Table 6

**Characteristics of the followers (n=276)**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>1 month-3 months</td>
<td>12</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>3 months-6 months</td>
<td>13</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>6 months-12 months</td>
<td>19</td>
<td>16.0</td>
</tr>
<tr>
<td></td>
<td>more than 1 year</td>
<td>75</td>
<td>63.0</td>
</tr>
<tr>
<td><strong>Reasons for following the NBA Facebook page</strong></td>
<td>Getting information</td>
<td>74</td>
<td>62.2</td>
</tr>
<tr>
<td></td>
<td>Game highlights</td>
<td>36</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>Interviews with players and coaches</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>Promotions, offers or deals from the NBA</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Day to day updates</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>View the NBA Facebook page</strong></td>
<td>Once a week</td>
<td>35</td>
<td>29.4</td>
</tr>
<tr>
<td><strong>Frequency of Facebook Use</strong></td>
<td>2-3 times a week</td>
<td>46</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>4-6 times a week</td>
<td>17</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Daily</td>
<td>10</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>2-3 times per day</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>4 or more times per day</td>
<td>5</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Reliability Measures for Each Factor**

Cronbach’s alpha coefficient was utilized to examine the reliability of each measure for this research. Usually, Cronbach’s alpha is used to measure scale reliability and the consistency of the scale construct (Field, 2005); alphas greater than .70 represent
acceptable internal consistency (Nunnally & Bernstein, 1994). Cronbach’s alpha for each measure ranged from .705 to .895. The reliability of the 6-item customer equity was .798. The 10 items representing brand equity were also acceptable at .895. In addition, the reliability of the four items for value equity was .756, and the three items for relationship equity was .705. The internal consistency for all variables included in the current research was acceptable (see Table 7).

Table 7

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer equity</td>
<td>3.4064</td>
<td>.71591</td>
<td>.798</td>
</tr>
<tr>
<td>Brand equity</td>
<td>3.7091</td>
<td>.65779</td>
<td>.895</td>
</tr>
<tr>
<td>Value equity</td>
<td>3.4064</td>
<td>.64024</td>
<td>.756</td>
</tr>
<tr>
<td>Relationship equity</td>
<td>3.4457</td>
<td>.65925</td>
<td>.705</td>
</tr>
</tbody>
</table>

Data Analysis of H1 and H2: ANOVA

ANOVA Assumptions

The assumptions for ANOVA were tested by homogeneity of variances and normality. For the homogeneity of variances, Levene’s test for equality of variances was utilized. Levene’s test was not significant for customer equity, value equity, relationship equity, or brand equity, thus the variances were considered equal. The normality test was utilized for ANOVA assumption (Field, 2005). A histogram and P-P plot were examined for checking of normally distributed residuals with a mean of zero. Also, the Kolmogorov-Smirnov and Shapiro-Wilk tests were used for the normality assumptions (Field, 2005). Initially, these tests indicated that customer equity and value equity were
not significant and were normally distributed. For relationship equity and brand equity, non-parametric statistics were used because there was a violation of normality. Despite attempting several transformations, such as Box-Cox transformations, relationship equity and brand equity were still not normally distributed, thus non-parametric statistics were used. Among the various non-parametric statistical methods, the Kruskal-Wallis method was utilized to investigate the two independent variables that were not normally distributed (Portney & Watkins, 2009). The Kruskal-Wallis test was employed because it is similar to a one-way ANOVA; it was used to compare the data between followers and non-followers of the NBA Facebook page that was not normally distributed.

**Hypothesis One**

To answer the first hypothesis, an ANOVA was performed to compare customer equity between the NBA Facebook page followers and non-followers. In terms of customer equity, there was a significant difference between the NBA Facebook page followers and non-followers, $F(1, 274) = 31.740, p < .001$. The results revealed that NBA followers scored significantly higher on customer equity ($M = 3.67$) than non-followers ($M = 3.20$). Means, standard deviations, and p-values are described in Table 8. Thus, results regarding the first hypothesis indicated that followers of the NBA Facebook page responded with higher customer equity perspectives regarding the NBA than non-followers (see Table 8).
Table 8

Result of ANOVA (Customer Equity)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followers</td>
<td>3.6709</td>
<td>.6431</td>
<td>31.740</td>
<td>1</td>
<td>274</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Non-followers</td>
<td>3.2059</td>
<td>.7048</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis Two

To answer the second hypothesis, a series of ANOVAs was performed to compare customer equity drivers, such as value equity, relationship equity, and brand equity, between the NBA Facebook page followers and non-followers. In terms of value equity, there was a significant difference between the NBA Facebook page followers and non-followers, $F(1, 274) = 26.348, p < .001$. The results indicated that the NBA followers scored significantly higher ($M = 3.54$) than non-followers ($M = 3.16$) on value equity. The ANOVA result is provided in Table 9.

Table 9

Result of ANOVA (Value Equity)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followers</td>
<td>3.5462</td>
<td>.6053</td>
<td>26.348</td>
<td>1</td>
<td>274</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Non-followers</td>
<td>3.1640</td>
<td>.6180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For relationship equity, due to non-normality, the Kruskal-Wallis test was utilized to make a comparison between the median values for followers and non-followers of the NBA Facebook page. There was a significance difference between NBA followers and non-followers with regard to the relationship equity ($\chi^2(1) = 42.692, p < .001$), with a
mean rank relationship equity score of 174.11 for followers and 111.51 for non-followers of the NBA Facebook page. The result is provided in Table 10.

Table 10

*Result of Kruskal-Wallis (Relationship Equity)*

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean Rank</th>
<th>Chi-Square</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followers</td>
<td>119</td>
<td>174.11</td>
<td>42.692</td>
<td>1</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Non-followers</td>
<td>157</td>
<td>111.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, the Kruskal-Wallis test was performed to examine the difference in brand equity with regard to NBA fans. The result revealed that there was a significant brand equity difference in followers and non-followers of the NBA Facebook page ($\chi^2$ (1) = 42.692, $p < .001$), with a mean rank brand equity score of 161.73 for followers and 120.89 for non-followers. Table 11 includes the output of the Kruskal-Wallis test with chi-square and significance values.

Table 11

*Result of Kruskal-Wallis (Brand Equity)*

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean Rank</th>
<th>Chi-Square</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followers</td>
<td>119</td>
<td>161.73</td>
<td>42.692</td>
<td>1</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Non-followers</td>
<td>157</td>
<td>120.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis two indicated that the followers of the NBA Facebook page recognized higher relationship equity, brand equity, and value equity perspectives than non-followers.
Data Analysis of H3, H4, and H5: Multiple Regression

Multiple Regression Assumptions

For hypotheses three, four, and five, the assumptions of multiple regression, such as linearity, independence of errors, and normality of the residuals, were checked. The assumption of linearity was examined with scatter plots of the unstandardized predicted values and the standardized residual plots. There was a linear relationship between the dependent variable and independent variables, which satisfied this assumption (Williams, Grajales, & Kurkiewicz, 2013). A Durbin-Watson statistic, which ranged from zero to four, was utilized to test uncorrelatedness of errors; the result was 2.18, which indicated there were no correlated residuals, and assuming independence of errors was appropriate.

For the multiple regression assumption, homoscedasticity was investigated by producing a residual scatter plot. As the residual plot indicated there was no pattern, the assumption of homoscedasticity was met. Multicollinearity was tested by checking the Tolerance and VIF. For each independent variable, the VIF value was less than 10, and tolerance values were greater than .1 (Levine, Ramsey, & Smidt, 2001). The VIF and tolerance values for value equity, brand equity, and relationship equity were 1.127, 1.448, and 1.520 and .887, .691, and .658, respectively. These results indicated that there was no violation of this assumption of multiple regression. In addition, the data were tested to check for outliers. There was no violation for customer equity and customer equity drivers. Lastly, the normality of the residuals was checked to ensure that the residuals were normally distributed. For the normality test, a histogram, a normal probability plot of the residuals, and Kolmogorov-Smirnov and Shapiro-Wilk tests of normality were conducted (Williams et al., 2013). There was no violation about the assumption of
normality. By checking these assumptions of multiple regressions, the hypotheses examined the extent to which three independent variables predicted the dependent variable.

To answer hypotheses three, four, and five, multiple regression was utilized to investigate whether brand equity, value equity, and relationship equity could explain customer equity. For the hypothesis, the customer equity of the NBA Facebook page followers was used as the dependent variable. The analysis revealed that customer equity drivers significantly predicted the NBA’s customer equity. The results of the multiple regression analysis showed that the three customer equity drivers, including brand equity \( (p < .001) \), value equity \( (p = .001) \), and relationship equity \( (p = .005) \), significantly affected customer equity. Brand equity, value equity, and relationship equity accounted for 58% of the total variances in customer equity. The standardized coefficients revealed that each customer equity driver was a significant predictor, and brand equity \( (\beta = .531) \) was a stronger significant predictor of customer equity than value equity \( (\beta = .216) \) or relationship equity \( (\beta = .211) \). These findings from hypotheses three, four, and five supported the notion that customer equity was influenced by brand equity, value equity, and relationship equity. The result is provided in Table 12.
Table 12

Result of Multiple Regression (N = 276)

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td>-.367</td>
<td>.329</td>
</tr>
<tr>
<td>Customer Equity</td>
<td>Value Equity</td>
<td>.217</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>Brand Equity</td>
<td>.593</td>
<td>.081</td>
</tr>
<tr>
<td></td>
<td>Relationship Equity</td>
<td>.241</td>
<td>.085</td>
</tr>
</tbody>
</table>

*Note. R² = .583, Adjusted R² = .572, F = 53.651, p < .001*

A summary of the testing results of the five hypotheses is presented in Table 13.

Table 13

Summary of Testing Results

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Significant differences exist in the customer equity between followers and non-followers of the NBA Facebook page.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Significant differences exist in the drivers of customer equity, such as brand equity, value equity, and relationship equity, between followers and non-followers of the NBA Facebook page.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Brand equity has a significant influence on the customer equity of the NBA Facebook page followers.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Value equity has a significant influence on the customer equity of the NBA Facebook page followers.</td>
<td>Supported</td>
</tr>
<tr>
<td>H5 Relationship equity has a significant influence on the customer equity of the NBA Facebook page followers.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
CHAPTER V
DISCUSSION

The purpose of the current research was to examine the relationships that exist between social media and the NBA’s customer equity. This chapter discusses the results of each hypothesis, explains the implications of the current research, and recommends directions for future research.

Hypothesis One

The first hypothesis claimed that significant differences exist in the customer equity between followers and non-followers of the NBA Facebook page. The results showed that followers of the NBA Facebook page had significantly higher customer equity in the NBA than non-followers, thus indicating that the NBA Facebook page plays a significant and positive influence on followers’ customer equity as it pertains to the NBA. The current finding demonstrates the importance of social media effects on sport fans’ levels of equity in sport organizations or teams, and this supports findings from previous research on the social media effect and the role it plays to help marketers connect with fans.

Sport fans use social media because it allows them to check game scores, learn about sport events, find out information about athletes and sport teams, and because it is practical, inexpensive, and can yield prompt responses (Özsoy, 2011). The current research supported this idea by discovering that the followers of the NBA Facebook page watch game highlights or obtain information through the Facebook fan page. As this
result indicates, sport organizations can encourage fans’ engagement through Facebook and make use of posted content and pictures to promote the teams (Prønschinske et al., 2012). According to Kananukul et al. (2015), social media is important for sport marketers to improve interactions for brand communications. Further, consumers’ engagement is essential to the development of marketing strategies, which must take into account customers’ satisfaction, behavioral intentions, and devotion to the brand (Jaiswal & Niraj, 2011; Sheth & Parvatiyar, 1995b). Nisar and Whitehead (2016) found a connection among social media brand pages, customer satisfaction, and loyalty. Social media is linked to stronger consumer-organization bonds because of the increased opportunities to create associations. Similarly, Luke (2009) noted that Facebook is a more useful tool than any other approach to communication, such as phone calls and emails, because it facilitates bonding between organizations and their many followers. Ramsaran-Fowdar and Fowdar (2013) highlighted that marketing via Facebook has many benefits due to the low cost of communications and instantaneous feedback from customers, which could positively affect customers’ purchase intentions. Similarly, Casteleyn, Mottart, and Rutten (2009) found that Facebook plays an important role for marketers because it enables them to relatively easily compile Facebook followers’ opinions and perspectives.

The findings of this research are consistent with the previous research because they reveal a significant difference in the NBA’s customer equity between the Facebook fan page followers and non-followers. This result supports the growing need for sport organizations to acknowledge the various benefits associated with social media use. The effort sport organizations have made to promote social media for two-way
communications to improve their values and develop strong relationships with customers could in turn lead the organizations to establish or further develop credible organizational images and thus increase the sport organizations’ sales (Bühler & Nufer, 2010).

As stated previously in the introduction, Facebook had 1.45 billion daily users and 2.20 billion monthly users as of March 2018 (Facebook, 2018). Based on Facebook’s popularity, Achen (2015) demonstrated that the platform was a beneficial means for NBA teams to improve their connections with fans and, through those connections, eventually enjoy increased ticket and merchandise sales. More importantly, Achen (2015) found that fans who were highly connected to their favorite NBA teams’ Facebook pages felt enhanced bonds with the teams and were more likely to have greater purchase and referral intentions. Further, fans prefer to receive content regarding players and scores via teams’ Facebook pages because they can actively interact with their favorite NBA teams through the pages. This finding suggests that sport teams are able to connect with their fans more through enhanced social media use than through more traditional marketing tools (Pronschinske et al., 2012). Thus, there is growing evidence that fans’ engagement via Facebook plays a pivotal role in enhancing connectivity between fans and teams, which is more likely to result in increased purchase intention. As such, it would behoove sport teams and organizations to acknowledge the importance of fans’ engagement via Facebook and thus to utilize social media as an important tool for accomplishing their marketing goals.

The current research also contributes to existing literature concerning the social media effect and customer equity drivers in the sport management context. The result provides practical implications for the sport organizations to understand the social media
effect as it relates to customer equity drivers. To increase customer equity, sport marketers should enhance product quality, service quality, and environmental factors, and attempt to reduce prices—an efficient strategy employed by the banking industry (Shahrokh et al., 2014).

**Hypothesis Two**

The second hypothesis claimed the existence of significant differences in the drivers of customer equity, such as brand equity, value equity, and relationship equity, between the NBA Facebook page followers and non-followers. The results indicated that followers of the NBA Facebook page had statistically higher scores than non-followers regarding brand equity, value equity, and relationship equity, thus demonstrating that social media use can have a positive influence on brand equity, relationship equity, and value equity for sport fans. This finding was consistent with Kim and Ko’s (2012) finding that social media use affected customer equity drivers in a luxury fashion brand context. While Kim and Ko’s (2012) finding suggests that marketers need to make effective use of social media to ensure future revenues in the luxury brand industry, the current research emphasizes the effectiveness of social media and its impact on customer equity drivers in the sport industry.

Several existing studies have highlighted the importance of customer equity drivers. First, previous studies found that brand equity plays a significant role in shaping consumer behavior. According to Sun, Garrett, and Ki (2016), brand equity is important because consumers tend to choose familiar or positive-image brands based on brand perception or brand recognition. According to Mills and Williams (2016), social media and brand equity have a close relationship in the context of campus recreational sports.
Similarly, positive connections were evident between social media communications and brand equity in fitness clubs settings (Wright, Williams, & Byon, 2017). Additionally, the current research supports the findings of Walsh et al. (2013), which found differences between followers and non-followers of a sport event’s Facebook page with regard to sport brands’ images. As the first empirical study on the differences between users and non-users of social media in brand personality, the findings of Walsh et al. (2013) provided both theoretical and practical implications and suggested some potential future study areas.

As Facebook users have more opportunities to be exposed to information related to a given event, this lends a positive public image to the event’s Facebook page. Walsh et al. (2013) indicated the importance of social media efforts in sport-brand management. Social media users can develop positive images of the event, and social media activities through organizations can be important tools for creating desired brand personality among participants at these events or among social media followers of organizations. Therefore, Walsh et al. (2013) concluded that Facebook, as one of the many social media platforms, might be a contributing factor in influencing a sport event’s brand personality. Although the current study did not delve into brand personality, which is a sub-dimension of brand management, it found a positive relationship between social media effort and brand equity, and this was the first known empirical study to examine the social media effect as it relates to the customer equity drivers in a sport management context. Further, this study supports Hamilton, Kaltcheva, and Rohm’s (2016) research, which examined the connections between brand and customers via social media since social media influences customers’ values. In the same way that these previous studies found that
social media efforts can increase brand equity, the results of this study suggest a positive relationship between social media efforts and brand equity for sport fans.

Second, the result herein indicated that a positive relationship exists between social media use and value equity. Value equity is relevant to consumers’ perspectives in terms of the value and use of products or services, which forms the basis of consumers’ objective evaluations of quality, price, and convenience (Lemon et al., 2001). Sweeney and Soutar (2001) stated that sport organizations provide entertainment and leisure to sport fans; thus, when consumers have pleasant experiences with a sport brand or provider, they will have positive value perspectives (Athanasopoulou, Kalogeropoulou, & Douvis, 2013). According to Sweeney (2008), value equity consists of six factors: entertainment value, social value, service quality, perceived price, epistemic value, and satisfaction in spectator sports. These factors are closely related to customers’ assessments of services that are provided by organizations. Thus, many sport organizations take into account consumers’ values to achieve increased value equity.

Consumers’ value equity has become a significant consideration among academicians and practitioners because they seek to evaluate firms’ present services or products (Pura, 2005). Pura (2005) contented that each customer has different motivations to use or select services and different value mechanisms, making it essential for sport marketers to understand consumers’ value equity as it relates to a given brand’s product or service. The result of this research showed that followers of the NBA Facebook page had significantly higher value equity scores than non-followers, which indicates that social media can be an important tool for enhancing fans’ perceived value of the organization. This result is crucial for sport marketers to not only be aware of the
significant role of social media in forming a high value of the organization but to also put more effort into engaging more fans in social media by providing an ideal platform or online environment for fans. Providing such a platform is especially important to address because fans’ engagement, experiences, and satisfaction through social media are tantamount to their actual game experiences or traditional media consumption.

Last, the result indicated that a significant relationship exists between social media use and relationship equity. Social media use has grown considerably and has become a huge part of sport organizations’ marketing efforts. In particular, Twitter and Facebook have been more widely used than any other social media platform for providing information and building relationships (Weinberg, 2009). Relationship equity influences consumers’ assessments by which they determine whether they are interested and find value in a firm’s products and services. When consumers can recognize special treatments or loyalty awards from a firm’s various loyalty programs, the relationship equity can be enhanced (Kim & Ko, 2010; Sun et al., 2016). In addition, relationship equity affects not only customer satisfaction but also repurchase intentions (Sun et al., 2016). Many professional sport teams have used social media marketing strategies to attract new customers and retain existing customers, and communicating with fans is important for building strong relationships. Pronschinske et al. (2012) noted that social media is a useful tool for improving connections between fans and sport organizations. Thus, it is important for sport organizations to comprehend the importance of enhancing links both on- and offline.

As stated previously, social media influences the links between fan identification and sport teams, players, and organizations. Richelieu and Pons (2006) reported that
social media can promote interaction with consumers and satisfy highly-identified consumers, and Real (2006) found that highly-identified fans are likely to utilize social media to support and connect with their preferred sport teams. According to Wallace et al. (2011), highly-identified fans are likely to achieve satisfaction with their favorite sport organizations, and as social media provides ideal platforms for consumers to interact with sport organizations’ brands (Walsh et al., 2013), it is considered a means by which brand managers and marketers can fulfill consumers’ needs (Wallace et al., 2011).

By examining customer equity drivers and the importance of marketing communication through social media in a luxury fashion context, Kim and Ko (2010) found that social media efforts are connected to all customer equity drivers because they deliver unique value to consumers that traditional markets did not provide. The current research supports Kim and Ko’s (2010) study because, in the same way that the luxury fashion brands industry is characterized by consumer requirements that change quickly, the sport industry faces fans’ fast-changing requirements; therefore, sport organizations need to quickly develop their business strategies. The current research thus contributes to the extant body of sport management literature.

The NBA league has been popular because of fan-friendly marketing, especially marketing that has been conducted via social media. Meng, Stavros, and Westberg (2015) noted that the NBA has been active in its use of several social media platforms to connect with current fans and attract new fans. Social media platforms, such as Facebook and Twitter, have become increasingly popular since 2010. All 30 NBA teams utilize Facebook and Twitter as the primary platforms through which they disseminate information and advertisements about teams and events (Meng et al., 2015). Of the two
social media platforms most employed by the NBA, there were more followers on Facebook than on Twitter in 2018, and the NBA is closely connected to its fans via the Facebook page. The current research showed that the NBA Facebook followers had significantly higher scores in NBA brand equity, relationship equity, and value equity than non-followers of the NBA Facebook page. The fans who followed the NBA Facebook page and who frequently checked for the NBA’s information had a tendency to feel greater satisfaction toward the NBA. Therefore, the NBA sport marketers need to ensure they update their information frequently and effectively to continue to satisfy NBA fans.

Taken together, the results of this study demonstrate the significance of social media marketing, and this significance could be relevant for a greater discussion concerning other professional sport organizations. While previous studies have demonstrated the importance of social media, limited suggestions have been made on how it could be useful from the marketing perspective. The results of this study offer convincing evidence that sport organizations have to be more active in utilizing social media marketing by applying the concepts of three customer equity components and determining how to prepare different approaches for followers and non-followers of their Facebook page.

**Hypothesis Three**

Hypothesis three posited that brand equity has a significant influence on the customer equity of the NBA Facebook page followers. The current research revealed that brand equity significantly influenced customer equity for the NBA Facebook page followers. However, this finding was not consistent with some previous studies.
conducted in other fields. For example, Kim and Ko (2012) found no significant effect of brand equity on customer equity in a luxury fashion brand context. Similarly, Shahrokh et al. (2014) found that brand equity did not influence customer equity in the banking industry. These two studies found no significant effect of brand equity on customer equity primarily because of the industry-specific contexts and because brand-centered marketing does not always guarantee companies will achieve success in their attempts to attract and maintain consumers.

By contrast, the current research indicated that brand equity had a positive effect on customer equity in the sport context, and this result aligned with a number of studies conducted in and with regard to various contexts. For example, Leone et al. (2006) showed that brand equity was statistically relevant to customer equity because brand equity and customer equity are closely linked; thus, when a firm constructs a brand, customer equity is enhanced (Peppers & Rogers, 2004). This finding was consistent with Hyun’s (2009b) in relation to the hospitality industry. Hyun (2009b) reported that brand equity is important for increasing customer equity through brand awareness and brand image factors since a favorable brand is also credible among consumers. Brand equity thus enables consumers to realize increased value in the brand and encourages closer relationships between the brand and consumers (Aaker, 1991; Erdem & Swait, 1998; Hogan et al., 2002; Kim et al., 2008; Yoo, Donthu, & Lee, 2000). Sweeney (2008) noted that brand equity influences customer equity because brand facilitates a strong bond between the customer and a company by reinforcing the company’s value among its customers. In other words, brand equity enhances the customers’ perceived value of a brand, which consequently improves the company’s value.
Brand equity is connected to customer equity, not only because it maintains good relationships and encourages new customers to engage with organizations, but also because it increases purchase intentions and visits. In other words, brand equity can provide an emotional bond between consumers and the brand, and understanding the relationships between brand equity and customer equity is essential to maintaining a strong connection with customers (Rust et al., 2000). Leon et al. (2006) noted that brand equity and customer equity are based on customer loyalty toward a brand, and this loyalty affects product pricing because highly loyal customers are willing to purchase expensive products.

In the sport industry, sport teams strive to enhance their brand equity by improving their relationships with customers (Gladden, Irwin, & Sutton, 2001) because brand is associated with a good reputation, a good attitude, and a feeling of gratitude (Severt, Severt, & Palakurthi, 2009). Because customer equity can impact the acquisition of new customers and the retention of existing customers (Blattberg & Deighton, 1996), which would be new and existing fans in the sport context, an exhaustive understanding of brand equity, consumer equity, and how to utilize these two concepts is crucial for sport marketers to effectively develop marketing strategies and plans. For these reasons, many studies have examined brand equity in the sport management setting (Bauer et al., 2005; Gladden & Funk, 2002; Ross, 2006), and the findings of the current study add to the existing literature by demonstrating the significance of brand equity and consumer equity. Thus, understanding the specific industry context is essential considering that sport fans’ emotional bonding and loyalty play a huge role in increasing brand equity in the sport industry.
Hypothesis Four

Hypothesis four proposed that value equity has a significant influence on the customer equity of NBA Facebook page followers. The current research indicated that value equity did significantly influence customer equity for the NBA Facebook page followers. According to Hyun (2009a), value equity, which was considered the primary factor in the success of restaurants (Koo, Tao, & Yeung, 1999; Sulek & Hensley, 2004), has a statistically significant influence on customer equity. Sun and Ko (2016) found the importance of value equity in its connection to customer equity. Therefore, organizations’ loyalty programs influence customers’ perceptions of perceived quality, convenience, and brand image. According to Lemon et al. (2001), values are salient for consumers because they evaluate products or services objectively. Accordingly, marketers need to satisfy consumers’ expectations and desires by providing them with rewards and benefits.

The current research showed that sport fans’ perceived value had a statistically significant influence on customer equity, which means that followers of the NBA Facebook page find it beneficial and valuable. Clavio and Kian (2010) indicated that college sport fans follow the official Facebook pages of their favorite teams to receive more information about their athletes or coaches. Similarly, the current study’s respondents followed the NBA Facebook page because it allowed them to receive information about their favorite teams. Therefore, sport organizations can customize their content to more effectively interact with fans. For example, consumers might find more value in the NBA because the NBA Facebook page has updated its content, added game highlights and game information, offered promotions or deals, or shared interviews with
players and coaches. Based on unique, new, and interesting Facebook-based content, the NBA can effectively increase its value among fans and improve its brand image.

The results of the current study were not consistent, however, with Zhang et al. (2010), who found that value equity was not the driver of customer equity in the sport shoe industry since the important element for sport shoe consumers has to do with protecting their feet while exercising. Although value equity had no effect on the customer equity in their study, value equity did affect customer loyalty, which means that sport shoe companies need to satisfy their customers and enhance their relationships with consumers to increase customer loyalty and customer equity. For these reasons, many researchers have focused on the relationship between value equity and consumer behavior in sport (Cronin, Brady, & Hult, 2000) and spectator sport (Kwon et al., 2007).

The current study successfully extends the previous studies that have focused on social media and value equity because it demonstrates the existence of a positive relationship between consumers’ value equity and the use of social media. For example, Kim and Ko (2012) noted that social media can improve value equity by allowing companies to offer new values to their customers via social media efforts such as those related to entertainment, interaction, trendiness, customization, and word of mouth in the context of luxury fashion brands. As previous research has emphasized the important role of social media as an effective tool to communicate with people (Williams & Chinn, 2010), this study suggests that sport marketers or social media experts directly associated with sport teams have to understand the close relationship between fans’ social media use and value equity. To increase value equity, marketers need to understand quality, price, and convenience of their brands for consumers because value equity is the consumers’
objective evaluation of the use of a brand. Thus, it is important for marketers to provide high quality content, appropriate pricing, or marketing strategies through social media platforms.

**Hypothesis Five**

Hypothesis five posited that relationship equity has a significant influence on the customer equity of the NBA Facebook page followers, which the result supported. Hyun’s (2009b) study also found a significant relationship between relationship equity and customer equity in the hospitality industry. Similar to the hospitality industry, the sport industry is considered a service industry that requires building strong relationships with consumers to enhance their perceived values and satisfy their desires. Hence, the result suggests that sport organizations should build strong and long-term relationships with fans through social media to maximize fans’ future purchasing intentions and brand loyalty, which are ultimate goals of sport marketers (Lemon et al., 2001).

Further, the findings of the current study are consistent with Rust, Zeithaml, et al.’s (2004) research, which suggested that customer equity drivers are connected to consumers’ perceptions of a firm’s value. Lemon et al. (2001) supported this idea that relationship equity serves to bond consumers and companies. According to Yoon (2010), relationship equity is built via retention and connection building programs, which serve to build mutual relationships between customers and companies. As such, relationship value can be formed via consumers’ perceived value.

To increase relationship equity, it is important to build strong relationships between consumers and firms. Thus, relationship marketing has received much attention in the service, industrial, and business fields (Berry, 1983; Jackson, 1985) because
relationship marketing is able to attract more customers and improve customer-organization relationships (Berry, 1983). The primary purpose of relationship marketing is to build strong and long-term relationships between organizations and customers such that the customers find value and the organizations generate profits (Williams & Chinn, 2010). According to Mahan (2011), sport teams are interested in communicating with fans and enhancing fan engagement. Accordingly, sport organizations need to recognize the importance of relationships with fans via the social media effect on branding and marketing (Coyle, 2010). For these reasons, a number of sport leagues and professional sport teams have recently begun using social media to share information and communicate with fans (Kim & Trail, 2011), and Harris (2012) stated that the fast-growing social media environment has enhanced interaction and customization for users. Grieve, Indian, Witteveen, Tolan, and Marrington (2013) found that Facebook users link to others and to organizations socially through Facebook’s ability to build relationships that lead to positive psychological consequences. Similarly, the current research sought to investigate Facebook’s effect on relationship equity with regard to the platform’s ability to help build strong relationships between the NBA and its fans.

Relationship equity has a statistically significant influence on customer equity, which indicates that Facebook pages can serve as tools that promote social bonding or psychological connections between organizations and their fans. Thus, it becomes imperative for sport marketers to fully understand the meaning of relationship marketing and determine how to increase relationship equity via social media for sport fans who possess different desires and wants.
**Theoretical and Practical Implications**

The results of the current research will contribute to both theoretical and practical implications regarding customer equity in sport management. In terms of theoretical aspect, the current study is the first empirical study to demonstrate the existence of a relationship between social media and customer equity in a sport context. The results of the current study demonstrate the importance of social media effect with regard to effective communication and enhancement of customer equity as suggested by Kim and Ko (2012). While Kim and Ko (2012) found that social media content encourages consumer engagement with the brand and improves customer equity, brand equity, value equity, and relationship equity in the fashion industry, the current study extends the existing literature to the sport management field.

The current study also discovered the significant positive effect of the three drivers of customer equity on customer equity in sport industry, which was contrary to the previous research (Kim & Ko, 2012; Zhang et al., 2010). While the mixed results of the relationship between the three drivers of customer equity and customer equity suggest that the relationship may vary by industry, the results also indicate that researchers need to consider industry-specific characteristics when examining customer equity drivers and customer equity. The current study confirmed the existence of close relationships between customer equity drivers and customer equity in the sport industry, and thus laid the groundwork for future research to further examine the relationships of three customer equity drivers to customer equity and the effect of social media on customer equity in various sport contexts.

From a practical perspective, the findings from the current research will help NBA marketers utilize their social media and improve the NBA’s overall equity in
several ways. First, NBA marketers will be able to evaluate their social media content based on fans’ level of engagement in social media activities. By utilizing various approaches aimed at this assessment they can promote more effective marketing strategies aimed at social media page followers and non-followers of the NBA or its teams. For example, marketers can analyze their social media followers in detail to understand their social media consumption patterns, including their habits (e.g., how many times they visit the pages) and their specific desires (e.g., preferred content style), and then develop and promote customized services to meet their various needs (Agnihotria, Trainorb, Itanics, & Rodriguezd, 2017; Hunter & Perreault, 2006).

Furthermore, by obtaining such specific information about their social media consumers, marketers can not only carry out cognitive and behavioral analyses on current social media consumption patterns (Kahan, 1998) but also accurately anticipate changes in consumers’ future behaviors (Gulliver, Joshi, & Michell, 2013; Keramati, Mehrabi, & Mojir, 2010). Therefore, marketers can capitalize on the detailed database of consumer characteristics from social media platforms to develop and implement effective marketing plans, which will ultimately bring in more revenue for the organizations. As this research endorses the notion that social media can increase organizations’ equity and yield positive effects, the findings from this research suggest the NBA marketers and practitioners be more active in utilizing the customized social media marketing approach to fans based on the different level of engagement in social media activities.

Second, the findings from the current research will be useful to have a deeper understanding of the potential outcomes and benefits of social media marketing. This study was the first known research demonstrating the positively significant relationships
among customer equity drivers, such as brand equity, value equity, and relationship equity in the sport context. Despite the increased popularity of social media, marketers seem to lack an understanding of the relationship between social media and customer equity, and they fail to understand that this relationship can increase the customer-level assessment of an organization and/or its products or services. In this sense, the results of this research will provide considerable help to marketers to understand the complex relationships among customer equity drivers. For example, the NBA marketers will be able to understand the importance of maintaining and enhancing long-term relationships between the organization and their customers, which will ultimately result in the organization’s positive economic outcomes. It is also essential for marketers to understand the important role of social media in establishing a favorable brand, which often leads to profits for organizations (Huter & Jauz, 2013; Keller, 2001). Taken together, the NBA marketers need to understand that social media is a valuable marketing tool that can positively influence their economic outcomes through the increased brand equity or relationship equity.

Last, the results of this research demonstrate the significance of social media marketing, and this significance could be relevant for a greater discussion concerning other professional sport organizations. While previous studies have demonstrated the importance of social media, limited suggestions have been made on how it could be useful from the marketing perspective. The results of this study offer convincing evidence about why sport organizations in general have to be more active in utilizing social media marketing by applying the concepts of three customer equity components and determining how to prepare different approaches for followers and non-followers of
their Facebook page. The NBA Facebook page provides quick updates and contents, so the NBA fans find it convenient to use and show high satisfaction about the service. Practically, other sport marketers can improve their Facebook page by acknowledging how to make their contents more interesting, how often they need to upload or update the contents, and how to communicate with their fans or consumers more effectively based on this research. Thus, other professional leagues are suggested to benchmark what the NBA has accomplished so far in terms of generating fan-favored social media platforms.

**Future Directions**

Future research is needed to focus on different social media platforms that the NBA uses at present. The current study examined Facebook as a primary venue to understand NBA fans’ perspectives because the NBA’s Facebook page had more followers than any other NBA social media page. In addition, the current study focused on Facebook because a large percentage of sport organizations have utilized Facebook due to its popularity and convenience in communicating with fans or consumers. However, consumer perceptions regarding the NBA could be different given different social media tools. Thus, it will be valuable to conduct research among different social media platforms such as Instagram, Twitter, and Snapchat since these social media tools have been used to satisfy customers’ different desires and interests. Because the current study is limited to only one social media platform, future research need to examine NBA fans’ customer equity and how it may be affected among different social media settings.

Future study is also necessary to focus on gender of the NBA followers. Another finding of the current study that is worth exploring, even though it was not included as a primary hypothesis, has to do with gender. The current study found that a difference
exists with regard to gender and the number of Facebook users who follow the NBA Facebook page. It might be difficult to generalize the finding regarding the gender due to a low number of female followers of the NBA Facebook page in this research; however, it is worth discussing the theoretical and practical implications of this given the relevant studies that have addressed gender differences in social media and marketing in the sport realm. Per the current study, there are significantly more male Facebook users than female Facebook users who follow the NBA Facebook.

This finding is contrary to Walsh et al.’s (2013) finding, which revealed significantly more female followers than male followers of the sport events’ Facebook pages. This contrary result suggests that sport organizations need to target and focus more on female fans by engaging them on social media (Walsh et al., 2013). Walsh et al. (2013) also argued that it became necessary to understand female fans and consumers from a practical standpoint because the existing literature showed that female consumers had different motivations behind their consumptive behaviors related to sport-branded products (Dietz-Uhler, Harrick, End, & Jacquemontte, 2000; Ridinger & Funk, 2006).

While this particular finding from the current research was not consistent with the previous studies in terms of the number of male and female followers of social media fan pages, it becomes essential for sport organizations to acknowledge the growth of the female consumer base; hence, sport marketers need to develop new marketing strategies focusing on how to engage more female followers in sport-related social media contexts and to provide female-centered social media content.

In addition, future research is necessary to examine the relationship between social media use and customer equity as it pertains to other professional sport leagues in
the U.S. The current research focused on the NBA due to its active utilization of social media for marketing purposes, but it is important for researchers to assess the social media effect in any other sport league contexts. Each sport league has different characteristics, and it would be worthwhile to determine whether the results of this research are applicable to other sport leagues. Due to the unique features that serve to characterize each professional sport league, results may vary, but it is still important to examine how the relationship between social media use and customer equity in other sport contexts might be similar to or different than the relationship found to exist between social media use and the NBA’s customer equity per the current study. Therefore, further research will be beneficial to understand the social media effect on customer equity drivers associated with the NFL, NHL, and MLB. Future study can contribute to the extant body of literature regarding the social media effect and other sport leagues.

Lastly, it will be interesting to conduct research related specifically to the NBA teams. Each of the NBA teams have their own social media accounts through which they communicate with fans. Depending on the NBA team’s social media efforts, the effect social media has on team-consumer relationships may vary. NBA team marketers need to understand the social media effect with regard to their specific teams.
REFERENCES


APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
DATE: March 6, 2018

TO: Jiyong Park
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1155860-2] Examining Relationships of Social Media to Customer Equity of the NBA

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: March 5, 2018
EXPIRATION DATE: November 28, 2021

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

The submitted modifications and amendments to your survey/questionnaire are approved.

Best wishes with this research.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherm May at 970-361-1910 or Sherm.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.
APPENDIX B

CONSENT FORM FOR SURVEY PARTICIPANTS
CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Examining Relationships of Social Media to Customer Equity of the NBA
Researchers: Jiyoung Park, PhD student, Department of Sport and Exercise Science
E-mail: jiyoung.park@unco.edu
Advisor: Dr. Alan L. Morse, Faculty, Department of Sport and Exercise Science
Phone: (970) 351-1722; E-mail: Alan.Morse@unco.edu

Thank you for taking the time to complete this survey. The purpose of this study is to explore the NBA
fans’ perceptions of social media and its relationship with customer equity of the NBA, which is defined as
a market-based asset that can increase both the financial performance and market valuation of
companies.

The survey will ask participants questions regarding the customer equity items of the NBA, if participants
were followers of the NBA Facebook page, their usage patterns, and demographic questions such as
gender and age. The survey will take approximately 15 minutes to complete.

There are no foreseeable risks associated with participating in this survey. The information you provide
may further help our understanding of the current state of the NBA social media characteristics. No
person will be specifically identified in any portion of reports generated from the study nor will you be
asked to provide your name. There is no direct benefit from participation. The information collected may
be indirectly beneficial by obtaining knowledge about the NBA social media; the information will also help
people closely working with sport marketers improve their social media marketing strategies.

Data will then be stored on the researcher’s computer in a password protected file, and a backup file will
be created to be stored on an online storage server with password. Data will be stored until the
completion of the study or for a period of three years and then, the data will be removed from the
researcher’s computer and the online server. Additionally, data will only be reported in the aggregate to
further mask the identity of any particular respondent.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you
may still decide to stop and withdraw at any time. Your decision will be respected and will not result in
loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity
to ask any questions please complete the survey if you would like to participate in this research. By
completing the questionnaire, you will give me permission for your participation. You may keep this form
for future reference. If you have any concerns or questions about your selection or treatment as a
research participant, please contact the Office of Sponsored Programs, Kepner Hall, University of
Northern Colorado Greeley, CO 80639; 970-351-1810.
APPENDIX C

SURVEY INSTRUMENT
Welcome participants!
Before you begin, please note that it should take no more than 15 minutes to complete the survey. The purpose of this study is to explore the National Basketball Association (NBA) fans’ perceptions of social media and its relationship with the NBA’s customer equity. You are invited to participate in this research and your responses will help to understand various opinions of the NBA. Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Having read the above and having had an opportunity to ask any questions please complete the survey if you would like to participate in this research. By completing the questionnaire, you provide permission of dissemination of your anonymous responses. Please select the response to each of the following questions that best describes your experiences with the NBA.

1. How interested are you in the NBA?
   ① Not at all ② A little ③ Neutral ④ A moderate amount ⑤ A great deal

2. How knowledgeable are you about the NBA?
   ① Not at all ② A little ③ Neutral ④ A moderate amount ⑤ A great deal

3. Do you use social media? (Facebook, Twitter, Instagram, etc.)
   ① Yes ② No

4. What is your favorite NBA team?
   ○ Atlanta Hawks
   ○ Boston Celtics
   ○ Brooklyn Nets
   ○ Charlotte Hornets
   ○ Chicago Bulls
   ○ Cleveland Cavaliers
○ Dallas Mavericks
○ Denver Nuggets
○ Detroit Pistons
○ Golden State Warriors
○ Houston Rockets
○ Indiana Pacers
○ LA Clippers
○ Los Angeles Lakers
○ Memphis Grizzlies
○ Miami Heat
○ Milwaukee Bucks
○ Minnesota Timberwolves
○ New Orleans Pelicans
○ New York Knicks
○ Oklahoma City Thunder
○ Orlando Magic
○ Philadelphia 76ers
○ Phoenix Suns
○ Portland Trail Blazers
○ Sacramento Kings
○ San Antonio Spurs
○ Toronto Raptors
O Utah Jazz

O None of the above

4.1. Do you follow your favorite NBA team's social media?
   ① Yes ② No

5. Have you followed or liked the NBA Facebook page?
   ① Yes ② No

5.1. What is your reason for following the NBA Facebook page?
   ① Getting information ② Game highlights ③ Interviews with players and coaches (post-game, practice, newspaper/TV spots) ④ Promotions, offers or deals from the NBA ⑤ Day to day updates (injuries, player trades and signings) ⑥ Other

5.2 How long have you followed or liked the NBA Facebook page?
   ① 1 month-3 months ② 3 months-6 months ③ 6 months-12 months ④ more than 1 year

5.3 How often do you view the NBA Facebook page per week?
   ① Never ② Once a week ③ 2-3 times a week ④ 4-6 times a week ⑤ Daily ⑥ 2-3 times per day ⑦ 4 more times per day

6. (For having experience with the NBA Facebook page) Please indicate your level of agreement with the following statements by selecting the appropriate number that matches your response from 1 to 5.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Using the NBA's Facebook page is fun.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
</tbody>
</table>
2. Content on the NBA's Facebook page seems interesting.  
3. Content on the NBA's Facebook page is the newest information.  
4. Using the NBA's Facebook page is very trendy.  
5. Conversation exchange with others is possible through the NBA’s Facebook page.  
6. It is easy to provide my opinion through the NBA’s Facebook page.  
7. The NBA’s Facebook page enables information-sharing with others.  
8. The NBA’s Facebook page offers a customized information search.  
9. The NBA’s Facebook page provides customized service.  
10. I like to pass information on brand, product, or services from the NBA’s Facebook page to my friends.

7. Please indicate your level of agreement with the following statements by selecting the appropriate number that matches your response from 1 to 5.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would suggest the NBA league to my friends/relatives.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>2. I am willing to say good things about the NBA.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>3. The NBA’s league reputation encourages my interest.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>4. The NBA’s customer service encourages my visit.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
</tbody>
</table>
5. If I were to attend a professional sporting event, an NBA game would be my first choice. ① ② ③ ④ ⑤

6. I spend more money at an NBA game than any other sport league. ① ② ③ ④ ⑤

8. Please indicate your level of agreement with the following statements by selecting the appropriate number that matches your response from 1 to 5.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generally, I think that the NBA offers good value for the money you spend.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>2. I think that the quality of the NBA is worth the cost.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>3. Compared to what I spend on the NBA, I think that I get a lot.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>4. Overall, I think that the value of the sport entertainment I am receiving from the NBA is high.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>5. The preferential treatment I get from the NBA is important to me.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>6. I am satisfied with the relationship I have with the NBA.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>7. I trust the quality of products from the NBA.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>8. Products from the NBA are of very good quality.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>9. Products from the NBA offer excellent features.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>10. Some characteristics of the NBA come to my mind quickly.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
<tr>
<td>11. I can recognize the NBA quickly among other competing brands.</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
<td>⑤</td>
</tr>
</tbody>
</table>
12. I am familiar with the NBA brand.  
   ① ② ③ ④ ⑤  

13. The NBA has a very unique brand image, compared to competing brands.  
   ① ② ③ ④ ⑤  

14. I like the brand image of the NBA  
   ① ② ③ ④ ⑤  

15. The NBA is a unique brand.  
   ① ② ③ ④ ⑤  

16. I consider myself to be loyal to the NBA.  
   ① ② ③ ④ ⑤  

17. I would recommend the NBA brand to my friends.  
   ① ② ③ ④ ⑤  

9. What is your gender?  
   ① Female ② Male ③ Prefer not to respond  

10. What is your age?  
   ① 18 – 23 ② 24 – 29 ③ 30 – 35 ④ 36 – 41 ⑤ 42 – 47 ⑥ 48 and above  

11. What is your ethnicity? (Choose only one)  
   ① Caucasian ② Hispanic or Latino ③ African American ④ Native American or American Indian ⑤ Asian ⑥ Pacific Islander or Native Hawaiian ⑦ Two or More Races ⑧ Other  

12. What is your annual income?  
   ① Less than $ 24,999 ② $ 25,000 to $ 49,999 ③ $ 50,000 to $ 74,999 ④ $ 75,000 to $ 99,999 ⑤ $ 100,000 to $ 124,999 ⑥ $125,000 or more  

   Thank you for agreeing to participate in this research.