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# Explaining NBA Success for Players with Varied College Experience

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## Abstract

The purpose of this study was to compare early career National Basketball Association (NBA) success between college basketball players who have either one year of college experience or four years of experience. This research set out to uncover if there was a substantial difference in the early performance of these categories of players in terms of specific success metrics that were outlined. With the growing trend of players leaving college after just one season of play, it was important to understand how these athletes are performing at the next level, especially in comparison to their graduate counterparts. The results of this study are valuable for both the athletes making the decision to leave and talent evaluators in the NBA. Quantitative secondary data was utilized. Players drafted between the years 2006 and 2014 were considered for the study and 86 total players (33 freshman; 53 seniors) were selected using stratified random sampling. Data was collected from www.basketball-reference.com. It was concluded, that one and done college basketball players perform at a higher level in their early careers in the NBA. In each of the eleven variables considered, one and done players scored higher than the graduates. These variables included draft position, offensive and defensive win shares, field goal percentage, usage percentage and minutes per game. The research in part determined variables that predict success in the NBA. These findings are important because they help to understand why there had been such a strong trend of the one and done college basketball player. When looking at the continued success that these players are having in comparison to graduates it demonstrated why those players were leaving, why there was a coaching shift and why the athletes felt as though there shouldn't be a restrictive draft eligibility rule.

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**Executive Summary**

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Quantitative secondary data was utilized. Players drafted between the years 2006 and 2014 were considered for the study and 86 total players (33 freshman; 53 seniors) were selected using stratified random sampling. Data was collected from www.basketball-reference.com. It was concluded, that one and done college basketball players perform at a higher level in their early careers in the NBA.

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Explaining NBA Success for Players with Varied College Experience

The true success of players in the NBA as well as what types of  attributes and characteristics lead to the most prosperous careers has been studied and evaluated at length (Deshpande & Jensen, 2015; Moxley & Towne, 2014). Other research has been performed that discusses which types of college production metrics translate well to the NBA setting for elite college basketball talent (Coates & Oguntimein, 2010). In addition, different media outlets have focused on the changing landscape of college basketball and the increasingly evolving coaching philosophies that are affecting both the athletes and the game itself.  (Rosenberg, 2015; Hanner & Winn, 2016). This ever-changing college basketball environment, that has affected the decision-making of young athletes, coupled with success evaluation metrics were observed to show trends that have developed and draw conclusions about when success is most likely to occur.

Each year since the NBA draft rule change, that restricted draft eligibility to athletes who are at least one year removed from high school, the trend of college basketball players that are leaving after just one season in college has risen and these one and dones have been selected highly within the draft (Harris, 2017). The changing environment of college basketball and the role of college athletics as a stepping stone have contributed to the obvious trend that has grown over recent years (White, 2015). Other factors that have contributed, according to past studies, were the seemingly impossible college adjustment process for "student-athletes," the lack of academic resources and dedication and an overall lack of academic focus as a result of athletic identity (Bimper, Harrison, Logan & Smith, 2017; Melendez, 2010). Due to these many potential factors, it was a great possibility that elite college basketball players were leaving before they were ready to enter the NBA draft and developed enough to play at such a high level. Drawing

connection to the reasons behind these athletes' decisions to leave early and their overall success in the NBA had not previously been studied.

The purpose of this research was to look at both one and done college basketball players as well as players who left college with a degree and evaluate which path was more beneficial for success early in their careers. Research has been conducted on what determines success in the NBA, as well as what college stats have the best chance to convert to the NBA, but there was a lack of research that compares the athletes at the next level. The data analysis of these athletes once they enter the NBA, helped to shed light on which path to the next level could potentially be more beneficial.

The research had a practical application because it can help both NBA scouts and college athletes trying to make the best decision for their future basketball careers, understand the trends in terms of success for both one and dones and players who stayed for at least four seasons. It could potentially give them an advantage to know how the similar players before them fared once in the league.

The overall purpose of this study was to determine the level of success that each category of player had in their first three seasons in the NBA. The research question of this study was:

How does early career NBA success compare for one and done players and players with a college degree?

The aim of the research was to present a better understanding of which career path for these young basketball players would serve them best in regards to achievement at the professional level.

**Background**

**College Athletics**

Division I of the National Collegiate Athletic Association (NCAA) consists of over 350 colleges and universities and over 170,000 athletes across their wide range of athletic teams. The NCAA has stated that the role of college athletics is to provide their athletes with the skills necessary to succeed in every aspect of their college career and beyond, throughout their lives (NCAA, 2017). Their focus from the NCAA point-of-view was not only achievement on the field of play but academically as well. According to the NCAA website, graduating is just as important as the athletic success that they provide for their teams and universities as a whole. They have also advocated that college athletics promote student-athlete well-being and the life skills that are learned along the way such as leadership, confidence and teamwork.

When looking at the NCAA and the materials that they have presented, it is clear that they are focused on painting a picture of athletics as just a portion of the college experience. It is all about the student-athlete and how they can promote a better quality and more sustainable future for the athletes within the NCAA's construct. Throughout the NCAA's website there were little to no mentions of the financial benefits that the colleges and universities stand to gain from athletic competition and the overall impact that athletic success has on the colleges (NCAA, 2017).

This is interesting because many of the researchers, journalists and scholars described a very different landscape and scope of the role of college athletics, especially at the Division I level of the NCAA. There was a trend that had emerged in which elite athletes were simply using the college setting as a stepping stone to the next level of athletic achievement. When looking at the role of the National Junior Collegiate Athletic Association or NJCAA athletics, White (2015)

discussed why athletes choose to go to junior colleges as a springboard to the next level. After

reaching a four-year institution within the NCAA, there is a focus for those who are good

enough, to make it to the professional level, without mention of the other aspects of the college

experience such as the academic piece. Ganim (2014) looked at the UNC academic scandal and

discussed the ways in which the athletes at Division I universities in many cases completely

dismiss the academic side of the college experience and only do enough to become NCAA

eligible. Academic cheating was a major occurrence at these colleges and universities because

the athletes were not mentally capable of completing the coursework required. Sara Willingham

of UNC said that many football players at UNC were reading at 4th or 5th grade levels. There

was a complete lack of academic focus for the many of these players that could be traced back to

their time in secondary school, in favor of athletic prowess.

Melendez (2009) has written about the college adjustment process and the role that

athletic identity plays on student-athletes. In athletic programs within Division I universities,

student-athletes have reported a disconnect from academic frameworks because of the continued

focus on athletics and a lack of institutional support. The time commitment and requirements

associated with being a Division I athlete are so great that it takes away from the academic

sphere. This can ultimately lead to negative effects on graduation rates, retention and future,

long-term success for these student-athletes. In Melendez's study he looked at freshmen and

sophomore student athletes exclusively and utilized a survey method which provided athletic

identity scores for the participants. In this study, athletic identity was defined as the degree that

an individual identifies with a strong athletic role throughout the different aspects of their life

such as cognitively, behaviorally and socially. This athletic identity goes a long way in

determining the culture in which they fit and can show trends within student-athletes with a high

or low level of athletic identity. Melendez concluded that student-athletes with higher athletic identity linked to lower academic performance. This strongly suggests that the socialization and culture surrounding collegiate athletics is too heavily focused on the athletic prowess and success of their teams that they are letting academics suffer. It was also noted in the study that male participants scored higher in terms of athletic identity and therefore lower academic performance scores. With Division I men's basketball and football leading the way as the highest revenue generating programs for universities, this isn't a surprising finding.

Melendez also discussed the unique situations of black student-athletes within the college atmosphere and explored the reasons behind it, similarly to the findings of Bimper, Harrison, Logan, and Smith (2017), who discussed the continued lack of academic success for African-American athletes in college. In their literature, the scholars present evidence that shows why black student-athletes largely fail to become successful academically that ranges from socialization, sport culture, athletic identity, the media and the demands at playing at such a high level.

Bimper, Harrison, Logan and Smith bring to light the fact that although these athletes are on a scholarship, they aren't being afforded the education that should come with it. The demands and rigors of the sport that they play do not allow them the necessary time or resources to fulfill their requirements and actually learn from them. The NCAA and the colleges that these elite athletes play for are raking in millions of dollars each year off the backs of these "student"-athletes, while very few actually receive any personal gain in the long-run from their athletic success. There is no need for these universities to place a high priority on academic success if it has a chance to take away from the product that the athletes put on the field or the court.

Bimper, Harrison, Logan and Smith (2017) also provided a backdrop to the differences between white and black student athletes. They showed that black student-athletes are actually socialized differently from a younger age into a sole focus surrounding their athletic success, limiting their academic achievement. There is less support from parents, and coaching figures in terms of academic focus and fewer resources that are readily available to these students in many cases. This has the ability to lead to a higher athletic identity, which results in an overall improvement in athletic performance but has negative effects on academic efforts. The authors argued that this has been a long-standing norm within the black community and looks to continue into the future with the way the trends were moving.

It was also important to understand that the media was playing a key role in the mis-education and mistreatment of black student-athletes that was leading to a lack of focus on non-athletic curriculum. They pointed to the recent media spectacle that surrounded Colin Kaepernick after his decision to kneel during the national anthem. The media made a deliberate statement to young, black athletes, when they said that Colin needed to stop talking about politics and play the game he is paid to play. They were saying that as a black athlete, there is no need for him to have a voice and needs to focus on his athletic performance. The media has the power to strongly influence and shape the mind of its audience and its impact on this issue can't be overlooked (Bimper, Harrison, Logan and Smith, 2017).

**One & Done and the NBA**

In 2005 and becoming effective for the 2006 NBA draft, the NBA imposed a new draft eligibility policy. Prior to the new rule's imposition, draft prospects were able to enter the draft and be drafted once they had graduated high school, no matter their age. With the new eligibility rules, in order to be eligible to be drafted into the NBA, a prospect must be one year removed

from high school (Draft, 2017). This leaves prospects with relatively three options to ponder before continuing onto their professional career dreams. They can simple train after they graduate high school and wait for the next draft, they can go overseas and play in a professional league such as the Chinese Basketball Association, Liga Endesa of Spain, Lega Basket Serie A of Italy or the National Basketball League of Australia or they can pick a college in the U.S. and attend to play basketball, while conforming to the college landscape. For most young prospects that have NBA aspiration, the NCAA's Division I basketball platform was the most recognizable and holds the easiest path to getting noticed and ultimately drafted into the NBA.

Draft eligibility rules throughout the major professional sports in America play a big role in the decisions that student-athletes make in regards to their future careers. The NFL requires that an athlete must be three years removed from high school before being able to enter the draft. While the NBA and NFL were restrictive when it comes to draft eligibility, the NHL and MLB promote freedom and choice for the players who are good enough to make it to the next level. In the MLB, players have the choice to enter the draft after high school or head to college and play there as they develop their talent. When the freedom to choose is presented, it allows the prospects to make the best overall decision for themselves and their skill development, rather than entering too early or being forced to enter later (Barra, 2012).

In the literature, it was apparent that due to the change in the draft eligibility rules in the NBA, there had been a shift in coaching philosophies at the college level that was actually influencing players to leave college after just one season. It was questionable whether this changing philosophy was actually benefiting one and done players or hurting them in terms of development and long-term success. Hanner and Winn examined this change in culture in big-time college basketball and have explained where and why the tide was shifting (2016). In their

examination, Hanner and Winn created a five category metric that looked at what the top

programs in the country were valuing in terms of their coaching philosophies. What they

concluded was that the top programs such as Kentucky, Duke, Kansas and Arizona were

continually showing signs of declining talent retention numbers, as well as an increase in instant

impact freshmen. This showed a direct connection between the new type of coaching system in

Division I college basketball and success at the highest level. Coaches were now understanding

that some players have shown signs that they want to get to the next level as quickly as possible

and use college as a stepping-stone, and they are capitalizing on it. Coach John Calipari of

Kentucky was using this ideology as a recruiting tool when he is telling players that they will

come to Kentucky, compete for a championship, develop quickly and leave for the NBA after

one season. Some of these players may be leaving to soon, before they are physically ready for

the NBA, but Calipari was recruiting and reloading talent so quickly that there isn't enough room

for everyone on the roster. In the article, Hanner and Winn actually discussed Duke's Coach

Krzyzewski and how over the course of his career he has relied on players that made it to their

junior and senior years before leaving to be successful. Over the course of the past few seasons,

even his coaching theory has changed and is actually working to his and Duke's benefit in terms

of overall program success.

When looking at one and done college basketball players, some within the media and

surrounding the NBA have acknowledged that the NBA draft eligibility change in 2006 was

restrictive for the "student-athletes" and potentially hurting their success (Harris, 2017). Harris

argued that it is unfair for the NBA to restrict the draft eligibility of the game's best up and

coming talent. He stated that leading up to the 2017 NBA Draft, nine of the top ten projected

picks happen to be of freshmen status and the only non-freshmen is a player who played

overseas. He argued that even without the one year of college basketball, these elite athletes would be drafted in the early first round. Suggesting that it is all about the perceived potential of the players have shown leading up to their college careers, rather than their performance in college. Harris stated that forcing them to play college basketball is a way for the NCAA to make money off the players and does little to benefit the elite players.

With these new coaching philosophies casting a wide net in the college game, the one and done trend was rising and it was making talent evaluation more difficult for NBA scouts (Mannix, 2014). Mannix took a look at the 2014 NBA draft class, which was filled with freshmen players, who left early for their careers in the NBA. It was imperative that NBA scouts are looking at these prospects in their high school careers, in workouts and in the limited film that many of these young talented players have. The sticking point for these NBA teams is that, even though a player will take a few years to develop in the league and be ready to perform at such a high level, they cannot pass on them because of the possible potential they possess. It makes it even harder when the prospects don't play as much throughout their only college season and when you factor in the level of deception that college coaches engage in during the draft process. Throughout the year college coaches won't praise their players as highly to NBA scouts, in hopes that they will return for another season, while after the athletes declare for the draft, there was nothing but praise and admiration that comes from the coaches of the athletes because they want to show recruits that they put kids in the NBA and get them drafted highly (Mannix, 2014).

**Predictors and Success**

When considering if a player is successful in their NBA career and in terms of being able to identify the best players prior to the draft, researchers have acknowledged the importance of

understanding trends in regards to college players and their eventual success or failure in the league. Through their extensive research, Coates and Oguntimein (2010) aimed to find out if college stats translated to the NBA and which ones correlated with the highest significance. In their study, the researchers concluded that draft prospects were actually evaluated differently based on program quality in college and conference. They also found that many college performance metrics did translate from college to the NBA. College rebounding, blocks and assists have a strong correlation to NBA stats, whereas scoring had one of the weakest correlations, although, those who had high scoring efficiency ratings in college had longer NBA careers and were compensated at a higher level during their careers.

During their study, they found that regardless of early success between two players who were drafted at different parts of the draft, the NBA team will invest more time and resources into the higher pick and be willing to stick with them for a longer period of time. They also found that in terms of overall NBA efficiency, draft position, experience and college quality were all predictors of sustained NBA success. One of the most important stats that was looked at in this study was scoring efficiency, which was important in determining draft position and therefore career longevity in the NBA. Although scoring a lot of points per game may not exactly translate to the amount of points scored in the NBA, a player that has the ability to score points and put up high efficiency numbers has a better opportunity to succeed and stay in the NBA. In a similar study, researchers found that the most important predictors of success in the NBA were age, college win-shares and overall college team success (Moxley & Towne, 2015).

The true impact of NBA players can be seen differently from the simple stat line or overall team success over the course of an NBA season (Deshpande & Jensen, 2016). Based on this research study, depending on the time of the game, the situation and the other players on the

court when a given player is playing, the impact of the player should be scored differently. Deshpande and Jensen did a statistical analysis on NBA stats and situations and created a formula that would present the true value of each NBA player. To truly gauge the success of a given player, the situation of the game and the other players on the court, both on the same team and the opposing one need to be taken into account. This formula that was created analyzed the win probability of each game, meaning the time left and the score of the game and the quality of the other players on the court through shifts based on advanced statistics. If a given player is playing with poorly graded teammates, playing against quality opponents and is impactful in a close game, the game situation will have a higher bearing on their impact score than if they were playing in "garbage time" at the end of a blowout game. This metric can more accurately determine if a player is a good investment based on their unique true impact score, their score compared to other players and their overall ranking from season to season.

With the continued trending upward of the number of one and done college basketball players, it was important to understand the reasons behind the numbers and look at which path to a successful NBA career was more likely. Research into this topic was very important for both NBA scouts and player personnel directors and the athletes themselves. For scouts and GMs in the NBA, it was important to be able to evaluate talent at an in depth level and any type of trend or advantage in the data can be of high importance, especially if it has the opportunity to give a team a leg up on their competition. For the athletes, it is important that they know all of the facts surrounding their college careers and leading them into the NBA. If it makes more sense for a prospect to stay another year or two in terms of success, they may be swayed to stay and continue to develop their skills as a basketball player and as a person as they have the opportunity to gain a college degree. Ultimately, the purpose of this research was to find out how

one and done college basketball players compared to players with a college degree in terms of

their early career success in the NBA.

**Method**

The purpose of this research was to understand how early career success compares for both one and done college basketball players and players who earned a college degree, once in the NBA. This was a quantitative study that utilized secondary data collection. To answer this question, data were collected from the NBA drafts from 2006 to 2014 and were collected for both rounds of the draft. These draft years were selected because the draft eligibility rule change occurred in 2005 and the first draft that was affected was the 2006 NBA draft. The draft years were limited to 2014 because in this study, three years of NBA statistical data must be collected, in order to analyze it effectively and determine a given player to be successful or not in their early career. As the question would suggest, both college basketball players who were drafted after just one collegiate season and those who graduated with a college degree were being studied. They were designated as freshmen and seniors respectively throughout the data analysis.

From 2006 to 2014 there were a total of 173 seniors and 68 freshmen drafted into the NBA in either the first or second round. Fifty-nine of the sixty eight freshmen that were drafted in those years were drafted in the first round (RealGM, 2017). There was a much wider range in which the seniors were drafted, but a higher percentage was drafted in the second round than the first. For this study, 50% of qualifying freshmen drafted into the NBA between 2006 and 2014 were selected as the sample, whereas 30% of qualifying seniors were selected to analyze. This decision was made in order to keep the number of the sample more manageable when looking at the data and analyzing the results. Therefore, overall there were 86 NBA players reviewed in the study. To select the sample from the overall population, stratified random sampling was used because the population was divided into smaller, subgroups based on shared characteristics or attributes within the groups.

Draft position was collected from www.basketball.realgm.com, while statistical data was collected from www.basketball-reference.com. The variables that were measured in order to analyze the data were success metrics such as offensive win shares, defensive win shares, field goal percentage, field goals per game, assist percentage, rebound percentage, true shooting percentage (a more accurate calculation of how efficiently a player shoots the ball by taking into account, field goal %, free throw % and three-point %), and usage percentage (percentage of team plays, in which a player is used while they are on the court). Other variables included minutes played per game and number of game played per NBA season for each player. For all of these metrics, they were collected on a year to year basis and taken as averages per season. Within the parameters of this study, zeros in the variables data were not considered to be incomplete data. During the data collection process, a detailed spreadsheet was created that housed all of the variables from college conference to minutes played and the advanced stat metrics. This spreadsheet is where the data was analyzed and compared between each group, in order to determine which was more successful.

Offensive win shares, field goal percentage, field goals per game and true shooting percentage were used because it was determined by Coates & Oguntimein (2010) that scoring was a very effective way of determining success in the NBA and a great predictor of career longevity in the NBA; a player that has the ability to score and score efficiently was more likely to have a successful NBA career (2010). True shooting percentage and usage percentage had the ability to go beyond the numbers in a sense and determine more accurately, the overall impact that a given player has on the game when they are on the court and just how efficient they are offensively.

When analyzing the data from the above metrics, in order to determine which career path is considered to be more efficient in terms of early career success, overall averages of the advanced stats were compared between players who left after just one college season and those who obtained a college degree. The subgroup with the better overall averages was determined to be more successful in early career success. Both descriptive and inferential statistics were used to analyze the data.

The data was analyzed to see if the success variables (field goal percentage, offensive efficiency, usage percentage, etc.) were able to predict whether the athlete went to college for 1 or 4 years with the outcome variables. T-tests were then ran to determine if the differences that were found between the two categories of players are significant; therefore, for example if there is a clear difference between shooting percentage for each category, is the difference significant in answering the question about who was more successful in their early career.

**Results**

**Sample**

In conducting this research, data were collected from basketball-reference.com in order to compare the early career success of one and done college basketball players, and those who stayed the four years in order to receive their college degree. Players were considered for the study if they had played either one or four years of college basketball. In addition, only players drafted between the years 2006 and 2014 were considered. After randomly selected the sample from the given population, 86 players constructed the sample; 33 players (38%) with one year of college experience and 53 players (62%) who graduated from college before entering the NBA.

There was a fairly even distribution of draft years that were represented through the research, as well as varying draft positions throughout the two rounds of the NBA draft (50 in round one; 36 in round two). Five players were considered from the 2006 draft, 12 from the 2007 draft, 11 from the 2008 draft, nine from 2009, 13 from 2010, six from 2011 and 10 players from the 2012, 2013 and 2014 drafts. Overall about fifty percent of possible one and dones and thirty percent of possible seniors were selected for the study, therefore displaying that the sample was representative of the population. The only players that were omitted from consideration in the study were those who missed their first season(s) directly after being drafted due to injury or other factors.

**Descriptive Statistics**

Statistics were analyzed to get a further understanding of what the players in the sample looked like and where they stood in terms of success statistics throughout their early careers. In terms of draft position, the mean position was 26th and had a range of 59 with the highest player being drafted 1st and the lowest being drafted last at 60th. Fifty percent of the players in the sample were drafted 23rd or higher and the mode of the data was actually 1st with five players being drafted first overall.

In terms of offensive and defensive win shares their means were 1.15 and 1.10 respectively, which are very similar, however there was a much higher variance in offensive win shares with a range of 7.73 as compared to defensive with a range of only 3.37. As for field goal percentage, the mean percentage for the players in this sample was 41.3% with a very large range of 56%. Over the three years that this study looked at, that the average field goal percentage throughout the NBA was 45.3%, a substantial difference in terms of what was found in this study. However, about 35% of the sample had a better average field goal percentage than the league average over those three seasons. The average field goals made per game for these players were 2.8 FG per game.

True shooting percentage, takes into account two point, three point field goals, as well as free throw shooting. In this study, the mean true shooting percentage was 47.5%, over three percent higher than the mean field goal percentage and 50% of the sample had a higher true shooting percentage than 51%. The mean usage percentage of the players studied was 17.8% with a fairly large range of about 24%. Lastly, when it came to minutes played per game and games per season, the sample had an average games played per season of 52.4 games throughout the 82 game season. As for minutes per game the mean was about 18 minutes per game with a range of 36 minutes.

**Inferential Statistics**

A regression with eleven predictor variables was used to predict the outcome variable of years in college, for this study one or four years. All interpretations of the analysis used, the Bonferroni-adjusted alpha of .004.

The regression also determined if each success variable was significant in determining the predicted outcome. The multiple regression model with all eleven predictors produced $R^2 = .486$, $F(11,74) = 6.355$, $p < .05$. It was significant. When looking at each variable within the regression it can be seen that only one of the variables was significant and therefore drove the significant result of the regression. The driving factor of the results was the draft position predictor variable.

Independent T-tests were used to determine which predictor variables had significant differences between one and done players and those with a college degree in terms of early career success. On average, one and done players were drafted higher ($M = 13.42$) than players with four years of college experience ($M = 34.55$). This was significant, $t(84) = -6.862$, p < .05.

When it comes to offensive win shares, one and done players had a higher average ($M = 1.6$) than graduates ($M = .8698$). This was not significant, $t(84) = 2.105$, p > .05. As for defensive win shares, one and done players had a higher mean ($M = 1.58$) than players with four years of college experience ($M = .797$). This difference was significant, $t(84) = 4.431$, p < .05.

On average, one and done players had higher field goal percentage ($M = .45$) than graduates ($M = .39$). This difference was not significant, $t(84) = 2.618$, p > .05. As for field goals per game, players who left as college freshman had on average, more field goals per game ($M = 3.9$) than seniors ($M = 2.04$). This difference was significant, $t(84) = 4.918$, p < .05.

On average, freshman had a higher percentage for both assist ($M = 11.9$) and rebound percentage ($M = 10.9$) than seniors assist ($M = 9.6$) and rebound percentage ($M = 8.9$). These differences were not significant respectively, $t(84) = 1.374$, p > .05; $t(84) = 1.997$, p > .05. On average, one and done players have a higher true shooting percentage ($M = .511$) than graduates ($M = .453$). This was not a significant difference, $t(81.583) = 2.789$, p > .05.

As for usage percentage, on average, one and done players had a higher percentage ($M = 20.3$) than players with four years of college experience ($M = 16.3$). This was a significant difference, $t(84) = 4.029$, p < .05. Lastly, when analyzing minutes per game and games played per season, on average, one and done players had more minutes per game ($M = 23.7$) and more games played per season ($M = 61.5$) than graduates minutes ($M = 14.4$) and games ($M = 46.7$). Both statistical differences were significant, $t(84) = 5.011$, p < .05; $t(84) = 3.162$, p < .05.

**Conclusion**

**Discussion**

Data was collected and analyzed in order to gain a better understanding of early career success with either one year or four years of college experience once in the NBA. There was a significant difference between the early career successes between one and done player and players who graduated college after four years of college experience. Forty-nine percent of the model variance could be explained using the variables that were analyzed. This means that through this research it had been determined, in part, variables that predicted success in the NBA.

The main variable that was driving the results was draft position. One and done players, on average were drafted 13$^{th}$ overall in the NBA draft, whereas graduate players were drafted 34$^{th}$. This was a significant difference and demonstrated that draft position had a direct relationship with early success in the NBA. Players who decided to leave early were considered to be of the highest talent level, even if they were not ready to contribute in the NBA immediately, they were still drafted highly based on their high level of potential.

The most interesting piece of information that the data showed upon running the analysis is that in every category or variable that was taken into consideration, the one and done players in the research ranked or scored higher than the four year college players. Some of these success metrics were designated as significant, whereas some were designated as insignificant when the individual T-tests were used. It was hypothesized that the four year players would have been more successful within the first three seasons in the NBA because they were more developed and ready for a professional career. The results display that being a one and done and being drafted higher in the draft relates to being more successful in their early careers.

The metrics that were significant were draft position, defensive win shares, field goals per game, usage percentage, minutes played per game and games played per season. As it can be seen in the results

of the study in each category that was significant, there were substantially higher numbers for the one and done players. One and done players, on average, doubled the defensive win shares and field goals per game as graduates. They also had a higher usage percentage than graduates by about 4%. When it comes to minutes and games played, those numbers were actually the closest between the two groups of players, with a variance of 15 games per season and just seven minutes per game. The closeness between those two statistics was telling because even though they two different players were playing similar minutes per game, the one and done players were producing considerably more output for their teams.

Looking at the role of college athletics and determining why young athletes are making the decisions they are is an important thing to understand. White (2015) had done research into the role of college athletics as a stepping stone and how it can be connected to the rise of the one and done college basketball player entering the NBA after just one season of college. Similarly, Ganim (2014) looked at academic cheating in high level collegiate programs and the potential root of the issues. When reviewing the findings of this study in conjuncture with the research by these women, it was interesting to see that due to the clear success that players with only one year of collegiate experience are having early on in their professional careers, that college basketball was truly being used as a stepping stone by many athletes who are good enough to make it to the NBA quickly. For players who aren't as talented there may be a higher focus on their education even though this still may not be the case entirely.

As noted by both Hanner and Winn (2016) and Mannix (2014), there was a clear shift in coaching philosophies in college basketball with the focus on the recruit, play one year, win and go pro concept. This shift could have definitely been attributed to the success that one and done players were seeing early in their careers coupled with the promise of bright lights and large contracts once drafted into the NBA. The young players who decide to leave after just one season knew that based on the data, they wouldn't be drafted any lower or garner any less success by leaving early and that is what made it an easy choice; that is why there has been such a shift in both coaching and rise in one and dones and the data presented reinforces those trends.

This research has also displayed that when observing the draft eligibility rule change in 2005, that the rule change could actually be hurting the athletes, rather than helping them. This has been discussed by many people within the media that it is a restrictive rule and isn't helping those who are good enough to be one and done anyway (Harris, 2017). Based on the early draft positions and the overall success that those athletes who are talented enough to be one and dones are seeing early in their careers, if there was no rule restricting eligibility and they could enter straight out of high school that they would be seeing a similar level of success in the draft and once in the NBA.

**Limitations**

A limitation for this study was the limited potential sample size based on the NBA draft eligibility rule change that occurred in 2005. This rule change stated that a player had to be one year removed from high school in order to be eligible for the draft. With the rule change in 2005, the 2006 draft was the first official year where there would be true one and done players, who didn't have the option to enter the draft any earlier.

Another limitation was the other factors of success that could have affected the overall performance of each player. Some potential limiting factors could have been the system that the player played in, in college and then was forced to play in once in the NBA, the coach, the talent level of the team they were drafted on and the conference they played in. Expanding on the talent level of the team, many of the players with four years of college experience were drafted lower in the draft, therefore being drafted to teams with a better record the previous season, which could definitely affect ability to perform and frankly play in terms of minutes and games per season.

As for delimitations, it was determined that limiting the research to players leaving after their freshman and/or senior years would create the best results. Lastly, one of the more important delimitations was the variables or success metrics that were chosen in this study. Overall, there were twelve variables that were chosen, variables such as player efficiency ratings, scoring, and blocks/steals

were left out. If the research was done over, it could have been seen that those variables made a difference with the percentage of the model variance that was explained.

**Recommendations**

It is clear that there are some good takeaways as well as some areas that could be explained upon to create additional knowledge. For college basketball players trying to decide which path to take there are a lot of factors that go into the decision, but in the data analysis it was determined that there is a significant difference the success of one and done players and graduates, in favor of the one and dones. It can be seen that there is a clear path to high draft position and early success for the players talented enough to leave after just one season. Similarly for talent evaluators at the professional level, there has been a demonstration that they can be setting themselves up for success by drafting these players. Although the data was significant, the research could be expanded to include more variables in attempt to create a higher level of significance with the model. In addition it may be possible to add other factors that were not added as mentioned in the limitations section, such as looking at the coach, the system and the success level of the team. There are opportunities to utilize this research, while also expanding it to create a better understanding and make it more viable in a real world application.

References

Barra, A. (2012, April 06). Both the NBA and the NCAA Want to Keep Athletes in College for
      Too Long. Retrieved April 10, 2017, from
      https://www.theatlantic.com/entertainment/archive/2012/04/both-the-nba-and-the-ncaa-
      want-to-keep-athletes-in-college-for-too-long/255535/


Carter, A. (2015, May 16). Gotta go: College players arrive ready to leave early for NBA draft.
      Retrieved March 14, 2017, from http://www.charlotteobserver.com/sports/college/mens-
      basketball/article21165348.html


Coates, D., & Oguntimein, B. (2010). The Length and Success of NBA Careers: How does
      College Production Predict Pro Outcomes? *The International Journal of Sport Finance,5*
      (1), 4-26. Retrieved March 22, 2017.


Deshpande, S. K., & Jensen, S. T. (2016). Estimating an NBA player's impact on his team's
      chances of winning. *Journal of Quantitative Analysis in Sports,12* (2), 51-72.
      doi:10.1515/jqas-2015-0027


Dwyer, L. (Ed.). (2015, April 03). When It Comes to Graduation Rates, Here's the Real NCAA
      Final Four Winner. Retrieved March 12, 2017, from
      http://www.takepart.com/article/2015/04/03/when-it-comes-graduation-heres-real-ncaa-
      final-four-winner


Ganim, S. (2014, January 08). Some college athletes play like adults, read like 5th-graders.
      Retrieved April 25, 2017, from http://www.cnn.com/2014/01/07/us/ncaa-athletes-
      reading-scores/


Harris, J. (2017). The NBA one and done rule is a restrictive farce. *The New York Amsterdam
      News,* 41. Retrieved March 26, 2017, from
      http://amsterdamnews.com/news/2017/mar/02/nba-one-and-done-rule-restrictive-farce/


Harrison, L., Bimper, A. Y., Smith, M. P., & Logan, A. D. (2017). The Mis-Education of the
      African American Student-Athlete. *Kinesiology Review, 6*(1), 60-69.
      doi:10.1123/kr.2016-0039

Mannix, C. (2014). The Power of One. *Sports Illustrated,120*(25), 42-46. Retrieved March 14,
    2017.


Melendez, M. C. (2009). Psychosocial Influences on College Adjustment in Division I Student-
    Athletes: The Role of Athletic Identity. *Journal of College Student Retention: Research,*
    *Theory and Practice,11* (3), 345-361. doi:10.2190/cs.11.3.c


Moxley, J. H., & Towne, T. J. (2015). Predicting success in the National Basketball Association:
    Stability & potential. *Psychology of Sport and Exercise, 16*, 128-136.
    http://doi:10.1016/j.psychsport.2014.07.03


NBA Past Drafts - RealGM. (n.d.). Retrieved May 1, 2017, from
    basketball.realgm.com/nba/draft/past_drafts/


Rosenberg, M. (2015). Deal with the Devils. *Sports Illustrated, 122*(15), 28-38. Retrieved March
    4, 2017.


White, C. (2015). Where are they now? *NJCAA Review, 66*(9), p. 15-19. Retrieved March 12,
    2017.


Winn, L., & Hanner, D. (2016). Offensive Developments. *Sports Illustrated,124*(11), 32-42.
    Retrieved March 14, 2017.