



# ASAHPERD Journal



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**ABOUT THE COVER:**

President Erin Reilly chose this theme for 2017-18 based on Dare Greatly by Brené Brown. *Dare Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent and Lead* inspires us to take on tasks, make decisions and think beyond our comfort zones. ASAPERD challenges you to Dare Greatly as you work, play, and live this summer!

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# Messages from the Presidents

## Erin Reilly & Gina Mabrey



### Erin Reilly, President 2017-2018

This is such an exciting time for our profession! It feels like we are really gaining momentum as a positive force in society. The general population is starting to realize that "exercise is medicine" and physical education is gaining parity with other school subjects through the 'Every Student Succeeds Act'. SHAPE America has launched the 50 Million Strong initiative and more people are becoming aware of the amazing benefits of exercise and physical activity on cognitive function.

We need to all do our part to keep the momentum going and ASAHPERD provides great resources through conferences and workshops, the journal, the website, social media, and more. I encourage you all to follow ASAHPERD on Facebook and Twitter, check out the webpage, and plan to attend the great conferences and workshops. We can all be strong advocates for our profession where we are and beyond. I hope that you will consider taking on a leadership role by running for an office, and that you will consider honoring a deserving colleague by nominating them for one of the many wonderful awards given by ASAHPERD.

The theme for the year, "Dare Greatly," builds on Gina Mabrey's call to "Leap Fearlessly!" The phrase refers to a quote by Teddy Roosevelt that prefaces the book *Daring Greatly* by Brené Brown (I highly recommend it!):

*"It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly." Theodore Roosevelt, 1910*

It takes guts to put yourself out there taking risks to do great things. You must be strong enough to allow yourself to be vulnerable to the possibility of falling on your face and getting criticized by the people who won't leave the stands. We can take on the risks and vulnerability together and support each other in daring greatly. Take the leap, jump off the mountain, hang on to the parachute, and soar.



### Gina Mabrey, President 2016-2017

As President of ASAHPERD during the past year, I had many opportunities to "Leap Fearlessly" with our organization. I am grateful for having an amazing team that accomplished so much in twelve short months. It is with heartfelt appreciation to my Board, Executive Director, and members that I reflect on our 2016-17 journey that passed too quickly.

Together, we hosted two extremely successful conferences. Our membership consistently supports Fall and Spring conferences, which places ASAHPERD at the top of the list nationwide for attendance, and this year was no different with over 1100 participants. The speakers, presenters, and sessions are always among the best offered and did not disappoint. Thanks to all who made a fearless leap to attend and to help put on these outstanding events.

Together, we fearlessly supported three philanthropic donations. First, the board approved a monetary gift to Louisiana's AHPERD to provide PE equipment for schools affected by the August flooding. Next, during the Fall Conference's silent auction, the membership generously donated to St. Jude Children's Hospital in memory of Sam Harmon who lost his battle with cancer at age 9. And, last, our future professionals filled backpacks with school supplies and delivered them to those in need for Youth Day of Service.

Together, we leapt into action as fearless advocates for our beloved profession. Members across Alabama attended local town hall meetings regarding ESSA; an appointed committee shared the importance of health and physical education's presence in state ESSA plans with Montgomery leaders; and I had the honor of joining two ASAHPERD colleagues in Washington D.C. to SPEAK OUT for HPE.

Passing the gavel to a new president may not seem like a fearless leap, but it brings new responsibilities for many people- myself included. Thank you for the opportunity to serve an organization that has given me so much. I hope each of you has been inspired during the past year to LEAP FEARLESSLY. And if you haven't yet, there is still time!

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Physical Activity Council - Patrick Shremshock & Chad Dyer  
Future Professionals - Justin Wiley, Candice Russell, Christian Scruggs & Phillip Smith

# ASAPERD Future Professionals Rock!

## Kamron Graham, 2017 Bernice Finger Award Recipient

The Bernice Finger Award is named in honor of Dr. Bernice Finger, Professor Emeritus from the University of Montevallo. Dr. Finger was President of the Alabama State Association for Health, Physical Education, Recreation and Dance in 1957-58. The award is given each year to the outstanding female and/or outstanding male future professional. This year's recipient is Kamron Graham.



Kamron is a graduating senior from the University of Alabama at Birmingham (UAB). As the president of the UAB physical education majors club (FLAME) Kamron has been a tremendous leader who gives freely of her time to their service projects and activities. As stated by her advisor Dr. Sandra Sims, "Kamron Graham's passion for our profession through her leadership and service makes her an excellent recipient of the Bernice Finger Award".

## 2017 Future Professionals Leadership Workshop

The Future Professionals Council held the annual FPC Leadership Workshop on April 20 in Orange Beach. The featured guest was Artie Kamiya, Great Activities Publishing Company. Mixing work with play, brain boosters on the beach included Spikeball and Flag Football. However, the day wasn't all about themselves. The future professionals completed their community service project by delivering back packs filled with school supplies to a local elementary school.

The 2017-2018 Future Professionals Council Officers were also elected. Congratulations to Justin Wiley, Chair and Candice Russell, Secretary. Phillip Smith and Christian Scruggs were appointed as Members at Large. Sandra Sims will serve as the advisor.



From left to right: Phillip Smith, Candice Russell, Sandra Sims, Justin Wiley, Christian Scruggs.

**The 2018 SHAPE America Southern District  
Annual Conference & the SHAPE America  
National Convention are “*together again!*”**

**This event will never be closer to your front door  
than on March 20-24 in Nashville, Tennessee!**



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## Fast Food Consumption of College Students in Alabama

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### Introduction

In recent decades, “the prevalence of obesity has increased dramatically in the United States, tripling among children and doubling among adults” (Surgeon General, 2010). According to the CDC (2014), the Midwest had the highest prevalence of obesity among adults (30.7%), followed by the South (30.6%), Northeast (27.3%), and West (25.7%). As obesity increases, so does the rate of health problems associated with being overweight. Lowery et al. (2008) noted that overweight and obese adults increase their risk for mortality and morbidity related to numerous chronic diseases, such as coronary heart disease, hypertension, dyslipidemia, diabetes mellitus, gallbladder disease, and certain types of cancer.

Obesity and overweight rates in college students are also on the rise (McClean-Meynsse et al., 2015). Typically, college students’ lifestyles are hectic, which may leave little time to prioritize proper nutrition and regular physical activity. Racette, Deusinger, Strube, Highstein, and Deusinger (2008) studied changes in weight and health behaviors from the freshman through the senior year of college. Results indicated body weight and body mass index (BMI) increased during four years of college (Racette et al., 2008). Moreover, the study determined

exercise patterns during freshman and senior years did not meet the American College of Sports Medicine (ACSM) recommended guidelines for physical activity that includes 150 minutes of moderate intensity exercise each week and resistance exercise of major muscle groups two to three days each week (McArdle, Katch, & Katch, 2013).

Lack of exercise certainly is linked to the obesity epidemic in the United States but so too is increased fast food consumption (Anderson, Rafferty, Lyon-Callo, Fussman & Imes, 2011). Anderson et al. (2011) examined fast food consumption and obesity in adults and reviewed frequency of fast food consumption among adults. Researchers defined regular fast food consumption as “usually going to a fast food restaurant two or more times per week” (Anderson et al., p. 2). Results showed regular fast food consumption was higher in younger adults and the prevalence of obesity increased with the frequency of fast food consumption. Further, it should be noted that college students between the ages of 19 to 29 dramatically increased their intake from fast food restaurants between 1977 and 1996 (Nielsen et al., 2002). Moreover, Kobayashi (2009) found BMI and fast food intake are positively correlated in college students ( $r = 0.220$ ,  $p < 0.05$ ).

Another factor that could affect a students’ BMI is living arrangements.

Students who live on campus have access to the on-campus cafeteria and tended to eat more of a variety of fruits, vegetables, and dairy products because the cafeteria offers an array of different foods with many healthy options. According to Brunt and Rhee (2008), students who live off-campus are more likely to be overweight or obese than those students who lived on campus or with parents because of the lack of healthy options in the home. Therefore, the purpose of this study was to evaluate the relationship between fast food (FF) consumption, body mass index (BMI), and grade point average (GPA) in college students in a free living college environment. Researchers also sought to determine if a student living arrangement (i.e., dormitory, off-campus apartment or house, parent's house, and fraternity/sorority house) impacted fast food intake.

### **Participants**

All research was conducted on the campus of a Division I university in Alabama. Participants ages ranged from 19 to 36 years ( $M=21.3 \pm SD=2.6$ ). The minimal age, 19, was used because this is the legal age of consent in Alabama. There were 175 (98 male, 77 female) participants in the study. Participants in the underweight BMI category ( $< 18.5$ ) accounted for 2.3% ( $n=4$ ), while 52% ( $n=91$ ) of participants fell into the normal BMI category (18.5-24.9). Overweight (25-25.9) individuals represented 25.7% ( $n=45$ ), obese (30-39.9) individuals made up 17.1% ( $n=30$ ), and 2.9% ( $n=5$ ) of the participants fell into the morbidly obese category (40 and above). Students who lived at a parent's house represented 23.4% ( $n=41$ ) of participants in the current study, while there were 49.7% ( $n=87$ ) who lived in an

off-campus apartment, 21.1% ( $n=37$ ) lived in a dormitory and 5.7% ( $n=10$ ) of participants lived in a fraternity or sorority house. All participants were informed of their right not to participate and of the confidentiality of their participation. To see all demographic information refer to Table 1.

### **Instrumentation**

The instrument used in this study was the Michigan Behavioral Risk Factor Survey (2005). This survey contains 12 questions on fast food consumption and was developed by researchers at the Michigan Behavioral Risk Factor Surveillance System (BFRSS) and has been proven reliable and valid (Anderson et al., 2011). Questions on this survey included how many times fast food was consumed in a month and the reasons why participants chose to consume fast food. In regards to the question concerning how many times per month the participant ate at a fast food restaurant, if the response to this question was at least once per month, 11 additional questions about fast food consumption were asked of the participant. However, if the response was less than once per month, all additional questions were skipped because of the effect of fast food on the participant's diet would be minimal (Anderson et al., 2011).

There were also 18 demographic questions asked before the Michigan Behavioral Risk Factor survey was completed. The questions included age, sex, race, height, weight, GPA, and type of residence (i.e., residence hall, off-campus apartment, parents' home, fraternity/sorority house). Each participant's self-reported height and weight were used to determine their BMI by the lead researcher.



## Data Collection

All data were collected from at a Division I university in Alabama at the on-campus cafeteria, student center, library, and in physical education activity courses. Upon agreeing to participate, students were given a paper copy of the demographics questionnaire and the Michigan Behavioral Risk Factor survey to complete. All surveys were completed in the presence of the lead researcher and collected immediately following completion of the survey.

## Statistical Analysis Procedures

All data was-were analyzed by the Statistical Packages for the Social Sciences (SPSS)-version 21 program. All (N=175) surveys were entered and analyzed. Means and standard deviations were computed for each variable. Correlation coefficients (r) were computed to evaluate relationships between variables. A one-way ANOVA was calculated to evaluate differences in FF consumption, living arrangements, and athletic participation.

## Results

Variables in this study consisted of BMI, BMI range, sex, currently living arrangements, scholarship, athlete (yes or no), GPA, and frequency of fast food (FF) consumption in the previous month. The descriptive and demographic statistics of the sample are reported in Table 1. The correlation matrices found significant relationships between FF consumption and GPA ( $r = -0.163$ ,  $p = .031$ ), and FF consumption and college athlete ( $r = -0.164$ ,  $p = .030$ ). Based on the way the data were categorized FF consumption was negatively related to GPA, and athletes tended to have greater FF consumption as compared to non-athletes. There was a significant

relationship between GPA and BMI ( $r = -0.195$ ,  $p = 0.010$ ). As GPA increased the BMI tended to be lower. None of the other variables of interest were significantly related  $p > 0.05$ . A univariate ANOVA was performed between where the students lived and FF consumption. Table 2 shows the descriptive statistics between current living and FF consumption. While the mean value was greater for fraternity/sorority house there was not a significant ( $p = 0.350$ ) difference among living locations.

## Discussion

Obesity is an epidemic that has been increasing rapidly in recent years and fast food consumption seems to be a driving factor behind this epidemic (McLean-Meyinsse et al., 2015). This study found significant relationships between FF consumption and GPA, and FF consumption and GPA and BMI. Results indicate that FF consumption was related to a lower GPA and a lower GPA was also related to a higher BMI. When considering living arrangements mean value of fast food consumption per month was greater for those who lived in a fraternity/sorority house but there was not a significant difference between living arrangements when statistically analyzed using an ANOVA.

Interestingly, the state of Michigan (where the BFRSS survey was created) ranked 18<sup>th</sup> in the prevalence of self-reported obesity among United States adults, but Alabama (the location of the current study) ranked 5<sup>th</sup>. The current study, when compared to previous studies completed in Michigan, found very similar results. Rafferty et al. (2008) found that the main reason for choosing a fast food restaurant reported by Michigan adults was convenience

(62.7%), taste of food (17.1%), sociability (8.1%), or cost (6.1%). The current study determined the main reason for choosing a fast food restaurant by Alabama college students was convenience (41.1%), cost (19.4%), taste of food (17.1%), or sociability (7.4%). Rafferty et al. (2008) found that 10.7% of Michigan adults reported they usually use “supersize” options when available and the current study also determined that 13.1% of Alabama college students reported they usually “supersize” their meal when available. Rafferty et al. (2008) also discovered the most frequently consumed fast food meal was lunch (47.5%), followed by dinner (36.2%) and in the current study, Alabama college students reported their most frequently consumed fast food meal was also lunch (46.3%), followed by dinner (25.7%). Since Rafferty et al. (2008) determined that fast food consumption and regularly “supersizing” meals were linked with obesity, the higher prevalence of obesity in Alabama could potentially be shown with the results of the current study.

### **Limitations**

This study exhibited various limitations that may reduce the generalizability to other populations. The sample size (N=175) is relatively large, but only came from a Division I University in the southeastern United States. Thus, results may not be applicable to other areas of the country. Moreover, it is typically found that eating habits are diverse based on region, which could have had an impact on the researcher's findings. A final limitation is the data relies on self-reported information and is subject to errors in reporting actual fast food intake, either intentionally or unintentionally. In this

study, fast food was defined as a type of restaurant specializing in low-cost carryout food that is prepared and served quickly.

### **Conclusion**

On college campuses, fast food is a popular alternative and unfortunately may not be the healthiest form of nutrition. Using the current variables, FF was found to be related to higher BMI values, and higher BMI values were found to be negatively related to GPA. Many people may not be aware of the link between fast food consumption, a higher BMI, and poorer academic performance. Although, significance was found with these variables, it should be noted the relationships were relatively weak. Therefore, future research is needed corroborate or refute the results of the current study.

In addition, this study revealed multiple areas that could be investigated in future research. A significant difference was found between participants currently on an athletic team and those that were not as it related to fast food consumption. That is, athletes consumed more fast food than non-athletes. This is certainly an interesting finding considering the impact that proper hydration and nutrition has on athletic performance. Future research could examine this finding to see whether it is apparent at other NCAA Division I institutions and which, if any, team(s) are affected.

Although significant difference between living arrangements was not found in the current study it was determined the highest fast food consumed in a month was by students residing in a fraternity or sorority house. Future research could examine if this is

consistent in other colleges across the United States or is simply limited to the current institution. Finally, the current study revealed over 10% of Alabama college students “supersize” their fast food meals when available. This information could be used to determine if a link between the “supersize” option and obesity exists in Alabama since Rafferty et al. (2008) found that “supersizing” was linked with obesity in other parts of the United States.

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Table 1. Demographic Characteristics of the Sample

Variable	n	%
<b>Sex</b>		
Male	98	56
Female	77	44
<b>Race</b>		
African American	66	37.7
White	97	55.4
Hispanic	2	1.1
Native American	1	0.6
Asian	5	2.9
Other	4	2.3
<b>Place of Resident</b>		
Dormitory	37	21.1
Parent's House	41	23.4
Fraternity/Sorority House	10	5.7
Apartment or House off Campus	87	49.7
<b>BMI Range</b>		
15-18.5 (Underweight)	4	2.3
18.6- 24.9 (Normal Weight)	91	52
25-29.9 (Overweight)	45	25.7
30-39.9 (Obese)	30	17.1
40 and above (Morbidly Obese)	5	2.9
<b>GPA Range</b>		
1.5-2.0	12	6.9
2.01-2.5	13	7.4
2.51-3.0	51	29.1
3.01-3.5	49	28
3.51-4.0	50	28.6

N=175

Table 2. Living Arrangements and Fast Food Consumption

Currently Live	Mean	Std. Deviation	N
Dormitory	8.1081	5.88210	37
Parent's House	7.2561	7.00992	41
Fraternity/Sorority House	10.1500	5.31272	10
Apartment or House off Campus	9.4483	7.79797	87
Total	8.6914	7.13694	175



ASAHPERD Transitions from *Leaping Fearlessly to Dare Greatly* as Erin Reilly presents Gina Mabrey with the Past President's Plaque

# Hazing! What School Administrators and Coaches Need to Know

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## Introduction

High school sport participation continues to grow. According to the National Federation of State High School Associations (2015), more than 7.8 million students participated in high school athletics in the academic year 2014-2015. More than 123,000 of those students participated in Alabama. Sport participation, as most of us know, can lead to a multitude of positive outcomes and associations. While these positive outcomes should be cited and praised, prudent professionals and administrators must also acknowledge that not every experience or outcome is positive; including but not limited to the risk of injury. One area that has been getting a great amount of attention lately is hazing. It is an unexpected risk that student athletes and even their parents are unaware of.

Unfortunately, hazing is a real societal issue. Consider the recent incident at Kingston High School where four students faced assault charges from a hazing incident involving a BB gun (<http://www.witn.com>). When these types of cases hit the news cycle people are often surprised about the incident.

What many may find surprising is that hazing is not uncommon in the educational system. In fact, research indicates that 47% of high school students have been hazed (Hoover & Pollard, 2000). Even more alarming is the fact that high school athletes have

the highest rate of hazing (47 %) among typical high school groups followed by the ROTC which has a hazing rate of 46% and Band with a hazing incident rate of 34% (Hoover & Pollard, 2000).

## Definition of Hazing

Hazing is a broad term that encompasses many activities, situations and actions that an individual must tolerate in order to become part of the group or team. When trying to construct a definition of hazing, one must consider many varying viewpoints. The definition and meaning of hazing often differs from one person to another. For example, an individual who is performing an act of hazing may define the term very differently than the person being hazed. Similarly, an administrator may perceive hazing and the various acts involved differently than a coach or parent. Furthermore, some individuals may only consider physical bodily acts as hazing, while others may include mental and sexual acts. The definitions of hazing becomes the central focus when administrators, coaches and managers are put in a position to decide if hazing occurred or if the activity was a case of horseplay gone wrong. While hazing has been acknowledged for centuries, there is no universally accepted definition. This may be due to the many forms and the variety of ways in which initiations and rituals take place.

## **A Matter of Law**

### *Anti-hazing Statutes*

As the number of reported hazing incidents has increased, so has the number of states that have passed legislation to deter hazing from occurring. Currently there are 44 states with anti-hazing statutes while six states have not developed or introduced anti-hazing laws (Nuwer, 2004). Current hazing legislation varies from state to state, and the punishments for hazing may include a fine, imprisonment or both depending on the state and the severity of the hazing incident.

### *Problems Associated With Anti-hazing Regulations*

In the states that have anti-hazing statutes, the laws are often imperfect. The states generally developed these statutes as a reactionary measure following a tragic hazing act that received attention. This reactionary response often leads to statutes that are not fully developed and well thought through.

Furthermore, hazing in the statutes is often not well-defined or is constricted in terms of scope. For example, Michigan law states "(b) 'Hazing' means an intentional, knowing, or reckless act by a person acting alone or acting with others that is directed against an individual and that the person knew or should have known endangers the physical health or safety of the individual, and that is done for the purpose of pledging, being initiated into, affiliating with, participating in, holding office in, or maintaining membership in any organization. Subject to subsection (5), hazing includes any of the following that is done for such a purpose: (i) Physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar

activity. (ii) Physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, or calisthenics, which subjects the other person to an unreasonable risk of harm or that adversely affects the physical health or safety of the individual. (iii) Activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or other substance that subjects the individual to an unreasonable risk of harm or that adversely affects the physical health or safety of the individual. (iv) Activity that induces, causes, or requires an individual to perform a duty or task that involves the commission of a crime or an act of hazing (750.411t). As mentioned previously, many of the anti-hazing statutes fail to recognize that hazing activities can result, not only in physical harm, but also lead to emotional and mental harm. Many cases of athletic hazing have resulted in athletes experiencing symptoms like "depression, feelings of guilt, anxiety, and hopelessness" (Graber, 2000, McGlone, 2005). The athletes that experience these symptoms following a hazing incident have little recourse when seeking relief under these statutes. Other definitions, like one from Louisiana, fails to recognize that hazing may take place on athletic teams. This definition only addresses cases involving fraternal organizations (La. Rev.Stat. Ann. 17:1801). Another way these statutes are limited includes only dealing with institutions of higher education (Pa. Stat. Ann. Tit 24, 5352) (Crow & Rosner, 2002; Edleman, 2005). In fact, only 27 states have laws that apply to high school hazing (Edleman, 2005). In addition, these statutes may ultimately fail to protect the safety of the athletes. This is due to the fact that

there is no universal definition of hazing nor is there a standard punishment for those that haze. Due to the ambiguity, students may not be deterred from hazing. In fact, based on media reports, it could be said that these anti-hazing statues are ineffective based upon the notion that hazing offenses appear to be on the rise at all levels of athletics (Farrey, 2000). It remains unclear whether more precise definitions would detour hazing as no research has been conducted to illustrate the effectiveness of hazing laws after definitions have been instituted. It is possible that if hazing were prosecuted under different laws that carry heavier penalties like kidnapping, sexual assaults and battery, it may send a strong message to organizations that these acts are to be taken seriously, and the result can be a reduction in reported hazing cases. However, there is no research to support this assertion at this time.

As history has revealed, education and hazing have a strong link. While research shows hazing is more prevalent than society is comfortable acknowledging, educational institutions and their respective boards have a responsibility to operate in a manner that is conducive to the educational mission. This responsibility includes providing a safe environment.

### **What Can an Administrator/Teacher/Coach Do?**

Administrators can start by taking a pro-active approach to hazing. In most high schools, there seems to be a culture in which student-athletes play a vital role in setting the standard of behavior for other students. As the students-athletes' role can be positive or negative, you as the athletic director, are in a unique place to set the tone, and call upon them for leadership in

helping to set the standard for all students. Here are some basic guidelines and suggestions of what you can do to help educate and reduce the risk of hazing at your institution:

1. **Educate!** Every season meet with your coaches, parents and student-athletes and discuss hazing. Define it. Read the headlines to the students; be open and honest about hazing and its effects. In addition, discuss the myths of hazing including that it will “bring the team together,” or that it is “a team building exercise”. Research shows that one reason why hazing continues is because people believe that hazing has positive effects on team and trust building. If team bonding and trust is a problem, set up team building and trust exercises within practice plans or outside activities that have positive effects on the team and the community. Examples of effective alternatives include: confidence courses, ropes courses, team building workshops, community projects or volunteering.
2. **Have a policy!** One of the most concerning elements of hazing is that most secondary institutions do not have a hazing policy. Now, there is no suggesting that having a policy stops hazing, but it does create awareness. Furthermore, research indicates that when students are asked how to stop hazing from occurring, they state that adults need to intervene and strong disciplinary actions need to be taken. A policy should



include a definition of hazing, consequences of hazing, sanctions, and what students should do if they know hazing is occurring within the school. This should include who they can talk to about hazing; listing a variety of people including principles “principals not principles”, coaches, athletic directors, teachers, nurses, and parents. Reporting procedures should be anonymous as students often fear reporting because they feel that it will only make the situation worse. Be very careful if you list examples of hazing activities. You will never be as creative as the students, nor can you create an all-inclusive list, and the students may think that only the activities listed are off limits.

3. **Use a Contract.** Have the students, coaches and parents sign a team contract stating that hazing and initiation rituals will not be tolerated. Also, include a statement that if someone learns about hazing activities being planned or occurring, they will report it to a school administrator. The goal is to keep everyone safe and to show that everyone involved cares about the health and safety of their teammates.
4. **Develop a timeline!** This helps you keep hazing education constant. It is not good enough to say don't do it at the first meeting of the season. You must reinforce your standards frequently. Hazing often occurs in preseason training or during the first weeks of competition. So remind

coaches and parents to keep a watchful eye for suspicious behavior. Remember hazing is usually planned in secret and carried out after hours. Look for clues that hazing activities may be being planned. Another way to preempt hazing is to make known positive team building activities during preseason and the first weeks of competition.

5. **Properly Supervise.** Have a coach or parent in the locker rooms before and after practices and on team buses. When possible, have a coach or parent stay adjacent to student hotel rooms when traveling. Hazing does not typically occur when adults are present.
6. **Use the Hazing Test.** If you are unsure if an activity is hazing than ask student-athletes the following questions: (1) Will all members participate in the activity? (2) Would you be willing to tell your parents, grandparents, coaches or teachers about the activity? (3) Would you object to seeing a photograph or video of the activity on the internet, local news or school paper? If any of the answers are “no” than this may be hazing.
7. **Create a positive culture.** Emphasize sportsmanship! Everyone deserves respect! Find positives even when the season is not going as expected. Sportsmanship is about dignity, respect, and character. Make sure you do your part to be a positive example for the students,

the parents and the coaches.  
Remember you set the tone!

**8. Provide alternatives to hazing.**

If you are at a school where hazing is a tradition, this may be difficult. However, it is possible to achieve the desired effect of team building without hazing! Start new traditions! Examples include team big brother or big sisters, or team mentors for new athletes. Volunteer in a community service project. Develop preseason ceremonies introducing the new team members that culminate with receiving their uniforms or a certificate welcoming them to the team. Take a team hike, go bowling, or to a movie. Adopt another school team and support their efforts during your off season to keep the team together and show support for all students.

**9. Have a Plan.** Know what to do if hazing occurs. Who needs to be informed? Be prepared to carry out the consequence you listed in the policy. If you have consequences and don't carry them out, nothing will be gained and hazing will continue. Have a plan to address parental concern, media inquiries, and legal issues. No plan is perfect but having a plan in place will help if the situation arises.

**10. Don't take out the fun!**

Remember what the goal of athletics is, and embrace it.

## Conclusion

In the state of Alabama, hazing is defined as (a) any willful action taken or situation created, whether on or off any school, college, university, or other educational premises, which recklessly or intentionally endangers the mental or physical health of any student, or (b) any willful act on or off any school, college, university, or other educational premises by any person alone or acting with others in striking, beating, bruising, or maiming; or seriously offering, threatening, or attempting to strike, beat, bruise, or maim, or to do or seriously offer, threaten, or attempt to do physical violence to any student of any such educational institution or any assault upon any such students made for the purpose of committing any of the acts, or producing any of the results to such student as defined in this section (c) the term hazing as defined in this section does not include customary athletic events or similar contests or competitions, and is limited to those actions taken and situations created in connection with initiation into or affiliation with any organization. The term hazing does not include corporal punishment administered by officials or employees of public schools when in accordance with policies adopted by local boards of education.

As the number of high school athletes continues to climb, it is incumbent upon Alabama school administrators and coaches to have a full understanding of hazing and its ramifications. The bringing together of all vested parties and unifying around the common theme that hazing will not be tolerated at our school is essential. Until this type of action occurs, no statute or policy will stop the hazing.

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## Peer Evaluations: Identifying Criteria for Assessing Student's Oral Presentations

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### Introduction

A peer evaluation is an assessment of students by other students, typically in a classroom setting. Peer evaluation is an innovative assessment (Mowl, 1996, McDowell & Mowl, 1996), which aims to improve the quality of learning and empower learners, by having student involvement help determine learners' strengths, weaknesses and needs. In some sense peer evaluations can be considered peer tutoring (Donaldson & Topping, 1996). As with other forms of peer tutoring with using peer evaluations there can be advantages for both tutor and tutee (Hartley, 1998). Research by Topping (1996) described the potential advantages of peer tutoring, including the development of the skills of evaluating and justifying, and using knowledge of a particular discipline.

Self- and peer-evaluation are often combined or considered together and both share many potential advantages in common. Peer-evaluation can help self-evaluation because by judging the work of others, students gain insight into their own performance. Brown, Race & Gibbs (1994) found peer- and self-evaluation helped students develop the ability to make judgments, which is a necessary skill for college study and professional life. Additionally, self and peer evaluation

promoted lifelong learning, by helping students evaluate their own as well as peers achievements in a realistic way and not just by encouraging them to rely on evaluation from an instructor (Brown, Rust & Gibbs, 1994). To summarize, Zariski (1996) and Race (1998) have described potential advantages of peer evaluation for students as:

- giving a sense of ownership of the evaluation process, improving motivation,
- encouraging students to take responsibility for their own learning, developing them as autonomous learners,
- treating evaluation as part of learning, so mistakes are opportunities rather than failures,
- practicing the transferable skills needed for life-long learning, especially evaluation skills,
- using external evaluation to provide a model for internal self-assessment of a student's learning (metacognition), and
- encouraging deep rather than surface learning.

A desirable outcome of education is an increased ability in the learner to make independent judgments of their own and others' work. Peer- and self-assessment exercises are seen as means by which these general skills can be developed and practiced. A peer

rating format can encourage a greater sense of involvement and responsibility, establish a clearer framework and promote excellence, direct attention to skills and learning and provide increased feedback (Weaver & Cotrell, 1986). The purpose of this teaching techniques manuscript was to determine if research literature identified pertinent criteria for a peer evaluation that assesses overall quality of student's oral presentation.

### **Defining Peer-Evaluation**

Peer evaluation allows instructors to share the evaluation of assignments with students. Peer evaluation, where students make comments and judge their colleagues' work, plays a vital role in formative assessment, but can also be used as a component in summative evaluations.

In terms of summative evaluation, studies have found student ratings of peers to be both reliable and valid. Orpen (1982) found no difference between lecturer and student ratings of assignments in terms of average ratings, variations in ratings, agreement in ratings or relationship between ratings. Arnold and others (1981) reported peer ratings of medical students were internally consistent, unbiased and valid. Other studies suggest there is variation according to factors such as student age (Falchikov, 1986). Additional research indicated peer evaluation represents the viewpoints of students who are in close contact and are familiar with behaviors and characteristics not apparent to an instructor (Barrett, 1996). According to Denisi, Randolph & Blencoe (1982), feedback from peers can more specifically address performance and

may be more effective in contributing to behavior changes and improvements.

The types of assessment where peer evaluation is used for summative purposes include essay writing, clinical skills, speeches and oral presentations, architectural designs, interpersonal skills, photography and small group activities. In all cases, the contribution to the overall assessment result is small (10-30%). The advantages and disadvantages are listed in Table 2.

There are potential problems of peer evaluation. At first glance there may be difficulties with the validity and reliability of assessment done by students. In the case of formative assessment (peer review) it can be asked if feedback from fellow students will be accurate and valuable. Formative assessment will be improved by the use of clear criteria (aligned with the learning objectives, of course), by double anonymity of evaluators and those being evaluated, and by having multiple evaluators of each piece of work. Pope (2001) proposed students may experience stress associated with peer assessment due to working harder when aware that peers are evaluating the assignment. Ultimately, the value of student evaluation will depend on the many variables affecting learning in a specific course (Moallem, 2005).

There is an additional problem with student summative assessment providing grades, and fewer consensus on its value (Hartley, 1998, Brown, Rust and Gibbs, 1994). Accuracy of peer evaluations may be questionable. Some peer-evaluators tend to under-mark (Heywood, 2000). Stefani (1994) found peer-evaluation to be closely related to tutor grading but somewhat lower. Marcoulides and Simkin (1995) found student's peer

evaluated accurately and consistently. Boud and Holmes (1995) described a peer evaluation scheme that was "as reliable as normal methods of marking" with a slight bias to over-marking. Haaga (1993) found students providing double-blind reviews of journal manuscripts were more reliable than professional peer reviews. In general, accuracy appears acceptable and is improved where peer-evaluation is anonymous, and evaluation moderated by the instructor, there are clear evaluation criteria, and peer-evaluators have some experience or training in assessment.

### **Peer Evaluation Criteria**

An oral presentation should have key components of preparation, organization, and engagement because they are considered crucial for the success of the presentation. Every presentation should have some sort of structure and organization. For determining the level of organization, keep in mind a proper introduction and conclusion go a long way in making the presentation successful. Additional important factors to consider include confidence, quality, and clarity of the presenter.

The amount of preparation invested in a presentation is manifested in the final product. Preparation can be measured through in-class observations, as well as through the presentation itself. There are several aspects to consider for this portion of the grade: punctuality, length of presentation, fluidity of presentation and use of props and supplements.

The presentation's organization can be measured by determining whether the transitions are logical and whether there is a clear objective. A

well-organized presentation has a strong introduction and a thoughtful conclusion, will communicate proper knowledge of the material, and will provide specific examples throughout. A number of strong organizational structures include topical, chronological, classification, problem/solution and cause/effect organization.

Enthusiasm, eye contact and use of time are all factors that contribute to making the presentation engaging for the audience. The presenter should not rush through the presentation, because doing so can contribute to misunderstanding of content, skipped content, and sloppily revisited content. Also, take into account whether the speaker incorporated visual aids into the presentation.

When determining confidence levels the speaker will easily make eye contact, invite audience participation and put the audience at ease, doing these things will help this aspect of the oral presentation be a success. The speaker should appear comfortable and easily connect with the audience.

In determining the quality of the information presented, recognize the speaker should provide enough details to support the point of the presentation but not too many unnecessary details that may confuse or bore the audience.

Determine the level of clarity. The speaker should be easily able to convey the point they are trying to make. Vocabulary should be easily understood, and all words should be spoken in a clear and fluent manner.

Providing students with a grading rubric or check sheet with which to peer evaluate fellow students gives them insight into what factors to focus on and develop in their own presentations. Ultimately, this helps instructors by

raising the overall quality of the students' work, and provides better insight into the students' preparation particularly for a group assignment.

D'Arcy, (1998) identified a set of evaluation criteria commonly used when creating a rubric or check sheet to assess oral presentations. Having such a set of criteria can be effective and evaluation criteria can give students a roadmap for measuring their oral presentation effectiveness. An outline of the criteria is identified in Table 3.

### **Incorporating Peer Evaluation in the Classroom**

One way students internalize quality work is by evaluating the work of their peers. However, when offering helpful feedback, students must have a clear understanding of what they are looking for in a peers' oral presentation. The instructor must explain expectations clearly to them before they begin (Millis, 2002).

One way to make sure students understand this type of evaluation is to give students a practice session using it. The instructor provides a sample speaking assignment. Individual students can determine what should be assessed and how criteria for successful completion of the communication task should be defined. Then the instructor gives students a sample completed assignment. Students assess this using the criteria they have developed, and determine how to convey feedback clearly to the fictitious student (Xie, Fengfeng & Sharma, 2008).

For peer evaluation to work effectively, the learning environment in the classroom must be supportive. Students must feel comfortable and trust one another in order to provide honest and constructive feedback. There are a

number of reasons to incorporate the use of a peer assessment as a requirement in the classroom:

- Empower students to take responsibility for, and manage, their own learning.
- Enable students to learn to assess and to develop life-long assessment skills.
- Enhance students' learning through knowledge diffusion and exchange of ideas.
- Motivate students to engage with course material more deeply.

There are also several ways an instructor can incorporate peer-evaluation in the classroom:

- Identify assignments or activities for which students might benefit from peer feedback.
- Consider breaking a larger assignment into smaller pieces and incorporating peer assessment opportunities at each stage. For example, assignment outlines, first draft, second draft, etc.
- Design guidelines or rubrics with clearly defined tasks for the reviewer.
- Introduce rubrics through learning exercises to ensure students have the ability to apply the rubric effectively.
- Determine whether peer review activities will be conducted as in-class or out-of-class assignments; for out-of-class assignments, peer assessments can be facilitated online by Blackboard.
- Help students learn to carry out peer assessment by modeling appropriate, constructive criticism and descriptive feedback through your own comments on student

work and well-constructed rubrics.

- Incorporate small feedback groups where written comments on assignments can be explained and discussed with the receiver.

What to consider when incorporating peer-evaluation into the classroom:

- Let students know the rationale for doing peer review; explain the expectations and benefits of engaging in a peer review process.
- Consider having students evaluate anonymous assignments for more objective feedback.
- Be prepared to give feedback on students' feedback to each other. Display some examples of feedback of varying quality and discuss which kind of feedback is useful and why.
- Give clear directions and time limits for in-class peer review sessions and set defined deadlines for out-of-class peer review assignments.
- Listen to group feedback discussions and provide guidance and input when necessary.
- Student familiarity and ownership of criteria tend to enhance peer assessment validity; therefore, involve students in a discussion of the criteria used.
- Students have more experience with academic tasks; therefore, be cautious about having them peer-assess professional tasks: choose tasks that lie within their relative experiential base.
- Encourage students to take more individual responsibility by not

having multiple peers assess the same task (Cho & MacArthur, 2010; Falchikov & Goldfinch, 2000; Kollar & Fischer, 2010).

## Summary

Based on the current literature, the majority of research seems to focus on group evaluations instead of evaluation of individual students. Additionally, peer evaluation appears as forms, check sheets, rubrics, guidelines, and directions and seem to be program and/or discipline specific. The research literature on peer evaluating is broad and briefly summarized below:

- Be sure to provide an opportunity for revision after peer review. (Andrade, 2009).
- Design projects with multiple review steps; design in self-evaluation, peer-evaluation and expert review (Moallem, 2005).
- Peer evaluations are generally not statistically different from expert evaluations especially with a larger number of reviewers (Topping, 1998).
- Peer evaluation processes can usually clarify assessment criteria (Chen & Tsai, 2009).

Based on this review and the criteria for creating a peer evaluation for assessing oral presentations of individual students Table 1 provides a sample student evaluation form. Any assessment method has wider effects than simple measurement; it can support the achievement of the planned learning outcomes or undermine them. Peer evaluation involves using your own knowledge and skills on a discipline, while engaging with the knowledge and skills of others.

Student evaluation of other students' work, both formative and



summative, has many potential benefits to learning for the evaluator and the one being evaluated. It encourages student autonomy and higher order thinking skills. Potential weaknesses can be mitigated with anonymity and multiple evaluators.

The use of peer assessment also encourages students to believe they are

part of the classroom community. In peer evaluation students take part in a key aspect of higher education: making critical judgments on the work of others. As a result the values and practices of teaching with those of research are joined together (Rowland, 2000, Boud, 1990).

**Table 1**

**PEER EVALUATION FORM**

PRESENTER'S NAME \_\_\_\_\_ TOPIC \_\_\_\_\_ DATE \_\_\_\_\_

**EVALUATION SCALE**

<b>4 = EXCELLENT</b>	<b>3 = ABOVE AVERAGE</b>	<b>2 = SATISFACTORY</b>	<b>1 = POOR</b>
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**THE PRESENTER:**

1. Included a concise and informative introduction explaining the purpose of the presentation	4	3	2	1
2. Communicated information clearly and distinctly.	4	3	2	1
3. Provided current and credible information about the topic.	4	3	2	1
4. Appeared knowledgeable about the topic.	4	3	2	1
5. Appeared prepared for presentation. (Did not read too much!)	4	3	2	1
6. Was enthusiastic and motivated while presenting the topic.	4	3	2	1
7. Stayed within an appropriate amount of time. (Not too long or too short)	4	3	2	1
8. Made eye contact made and used appropriate vocabulary.	4	3	2	1
9. Followed a logical sequence in presenting the topic.	4	3	2	1
10. Was able to answer questions or refer the audience to other resources.	4	3	2	1

Evaluator Name \_\_\_\_\_ Total \_\_\_\_\_

**Comments:**

*NOTE: This "Peer Evaluation Form" was created by Dr. William Hey, a co-author of this article.*

**Table 2**

**Peer Evaluation Advantages and Disadvantages**

<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>• Helps students become more autonomous, responsible and involved.</li> <li>• Encourages students to critically analyze work done by others, rather than simply seeing a mark.</li> <li>• Helps clarify assessment criteria.</li> <li>• Gives students a wider range of feedback.</li> <li>• More closely parallels possible career situations where a group makes a judgment.</li> <li>• Reduces the marking load on the lecturer.</li> </ul>	<ul style="list-style-type: none"> <li>• Students may lack the ability to evaluate each other.</li> <li>• Students may not take it seriously, allowing friendships, entertainment value, etc. to influence their marking.</li> <li>• Students may not like peer marking because of the possibility of being misunderstood, etc.</li> <li>• Without lecturer intervention, students may misinform each other</li> </ul>

(van Zundert, Sluijsmans & van Merriënboer, 2010).

**Table 3**

**Rubric Evaluation Criteria for Oral Presentations**

<b>Criteria</b>	<b>Measurement</b>
A. Organization and Development of Content	<ul style="list-style-type: none"> <li>• Opening statement gained immediate attention?</li> <li>• Purpose of presentation made clear?</li> <li>• Previewed contents of speech?</li> <li>• Main ideas stated clearly and logically?</li> <li>• Organizational pattern easy to follow?</li> <li>• Main points explained or proved by supporting points?</li> <li>• Variety of supporting points (testimony, statistics, etc.)</li> <li>• Conclusion adequately summed up main points, purpose?</li> </ul>
B. Delivery	<ul style="list-style-type: none"> <li>• Presenter owned the space and was in control?</li> <li>• Held rapport with audience throughout speech?</li> <li>• Eye contact to everyone in audience?</li> <li>• Strong posture and meaningful gestures?</li> </ul>
C. Visuals	<ul style="list-style-type: none"> <li>• Visuals clear and visible to entire audience?</li> <li>• Creative and emphasized main points?</li> <li>• Presenter handled unobtrusively and focused on audience?</li> </ul>
D. Voice	<ul style="list-style-type: none"> <li>• Volume</li> <li>• Rate (pacing)</li> <li>• Pitch</li> <li>• Quality</li> <li>• Energetic and included everyone in dialogue?</li> </ul>
E. Comments	

(D'Arcy, 1998)

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## Retained Primitive Reflexes: Implications for Physical Education

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### Introduction

Problems with attention, concentration, writing, and reading; fidgeting, squirming while seated, and lack of coordination are issues related to neuro-motor immaturity (Blythe, 2011). There is an inverse relationship between nervous system immaturity and readiness to learn. Approximately twenty percent of children without diagnosed learning disorders are thought to have some level of retained primitive reflexes. Research indicates that children diagnosed with ADHD, dyslexia, and Autism Spectrum Disorder, are significantly more likely to have retained primitive reflexes (McPhillips et.al., 2000 & 2007; Melillo, 2011, Taylor et.al. 2004; Blythe, 2011).

Babies are born with a set of survival reflexes that help them progress through normal developmental stages. These primitive reflexes include sucking, grasping, the startle reflex, and many others. By the time a child reaches one year old these reflexes should all be integrated, and then postural reflexes emerge. Sometimes specific reflexes may not integrate at the appropriate stage of development. Shifts in parenting practices and children's play behavior are thought to be related to the rise in the incidence of retained primitive reflexes and related sensory integration issues (Blythe, 2011). If changes are not

made in our society, incidence of retained primitive reflexes and their associated problems will most likely continue to increase. We need to go back to letting infants and toddlers move more, and young children need to go back to playing the way they did before technology such as iPads, Tablets, and smart phones became so prevalent (Blythe, 2011). The purpose of this article is to raise awareness of retained primitive reflexes and equip physical educators to incorporate reflex integration exercises into the curriculum.

Two cultural practices that have changed in the past few decades that are thought to have had a negative impact on neuro-motor development are the increased use of baby equipment, and changes in the way children play. According to Blythe, "...*movement is the primary medium through which sensory integration takes place.*" (2011, p. 31) Movement is critical for normal development, but modern baby equipment restricts normal movement patterns. Infants often do not get enough "tummy time" to be active in the ways that lead to the inhibition of primary reflexes as they go from car seats to baby bouncers and other equipment. It is important for children to crawl a minimum of four months (preferably six) before walking, and a common report from parents with a child

who tests positive for retained reflexes is that the child either did not crawl normally, or crawled for a very short time before walking. The increased reliance on screens for keeping babies occupied often carries over into early childhood and beyond, reducing time for active play. Parent's and caregivers fears have led to changes in playground equipment, outdoor activity, and free range movement for growing children. Taken together, these changes in cultural child-rearing practices have likely exacerbated the prevalence of signs of immaturity in the central nervous system of a generation of children. We recognize that most parents and caregivers do the best they can with what they have and what they know. It is therefore important that educators understand these issues and educate current and future parents and caregivers. In the meantime, physical education teachers can incorporate exercises in order to remediate neuro-motor immaturity.

### **Reflexes that Interfere with Coordination and Readiness for Learning**

Research shows that, among others, two primitive reflexes which, if retained beyond the first year of life, affect coordination and school readiness (Blythe, 2011, McPhillips & Sheehy, 2004, Konicarova & Bob, 2012). They are the Asymmetrical Tonic Neck Reflex (ATNR) and the Symmetrical Tonic Neck Reflex (STNR). The ATNR reflex is elicited when babies turn their heads to the side. When facing to the right, the right arm will extend and the left arm will flex, and the opposite occurs when turning the head to the left. The STNR is elicited when a baby looks up or down. When looking down the legs extend and

the arms flex, and the opposite occurs when looking up. Both reflexes are integrated primarily through crawling and should not be present beyond the first year.

School children in a large study in Northern Ireland (n= 739) who had a persistent ATNR were found to have significantly lower reading scores than children who did not test positive for the ATNR (Mc Phillips and Jordan-Black, 2007). McPhillips and Sheehy (2004) screened children in low, middle, and high performing reading groups and found that children in the lowest reading group were significantly more likely to have a persistent ATNR, with 17% exhibiting a high level ATNR, and only 24% showing no presence of ATNR. By contrast, 0% of the children in the middle and high groups exhibited a high level ATNR, and 66% showed no presence. Both studies were conducted with children in mainstream education. Studies conducted with children diagnosed with ADHD, dyslexia, and autism have shown up to 100% have retained primitive reflexes (Blythe, 2011). Taylor, Houghton, & Chapman (2003) found that boys with an ADHD diagnosis were significantly more likely to have a retained ATNR and STNR. Konicarova & Bob (2012) suggest that retained primitive reflexes may play a significant role in ADHD symptoms.



Nine year old testing positive for a retained ATNR. When the head is turned the elbow flexes reflexively.



Nine year old testing positive for a retained STNR. When the head flexes the arms flex reflexively.

There are few published studies on the effects of movement programs in school related to rehabilitating retained reflexes and improving academic outcomes. However, current research is promising. The SMART (Stimulating Maturity through Accelerated Readiness Training) program was implemented in 17 K-3 classes in Title I schools in North Carolina with great success in improving literacy skills, especially among minority males (Giese & Deboer, 2006). Part of the program involves reflex integration exercises, and they note the following:

Stimulation of immature, retained primitive reflexes removes much discomfort that children exhibit in unusual seat and desk postures that are so often observed in classrooms today. By removing these barriers to concentration and attention, students are able to develop sustained attention and complete assignments in a relaxed rather than an uncomfortable and anxious state. (p. 4)

A two year study of children in Belfast (n=683) found that a Primary Movement program was successful in both reducing ATNR persistence and increasing scores in math and reading

(Jordan-Black, 2005). McPhillips, Hepper, & Muhern (2000) found similar results- the exercise program was successful in suppressing retained primary reflexes, and there were significant gains in reading.

In an unpublished pilot study of the effects of an after-school program (six weeks, four days per week, 20 minutes per day), Reilly, Higginbotham, & Williford (2015) found that all of the children with retained reflexes made significant improvement toward integrating the reflexes, and the group as a whole made significant improvements in coordination and balance. Results found an increase in mental age of nearly one year with just six weeks of training. Many of the exercises used in the program were traditional therapeutic ones typically prescribed by physical and occupational therapists. The exercises were incorporated into games and activities for a group setting. The games and activities were also field tested in physical education settings, and in the Brain Pump® exercise class which was developed by Higginbotham and Reilly. The full program is comprehensive and includes modified therapeutic exercises for the vestibular system, proprioception, core strength, crossing midline, and reflex integration. A sample of reflex integration exercises, games and activities are described below.

### **Exercises for ATNR and STNR Integration**

#### **CRAWLING**

Purpose: ATNR and STNR integration

What to look for: Children might initially display an immature crawling pattern such as advancing same side arm and



leg, bunny hopping, only using one side, etc. Children who are unable to crawl correctly at school age most likely did not crawl correctly as babies and will need extra time. Encourage a normal cross-crawl pattern (up on all fours with right leg advancing forward at the same time as the left arm advances).

Procedure: Incorporate crawling variations into warm-ups and locomotor skill practice.

1. Commando crawl with stomach on the ground
2. Cross crawl- cross arms across the midline while crawling on all fours
3. Animal walks such as crab crawl and bear crawl.

### **WALL LEAN**

Purpose: ATNR integration

What to look for: Children with an ATNR may bend at the elbow when they turn their head. Encourage them to keep trying.

Procedure:

1. Take two steps from the wall and put feet together.
2. Lean into the wall with right hand on wall, keep arm straight, turn head strong to the left.
3. Hold for 30 seconds and repeat on the other side.

### **ROCKING HORSE**

Purpose: ATNR and STNR integration

What to look for: When looking right and left emphasize keeping the head in alignment- the head should not bend backwards or forward. Children with an ATNR may bend at the elbow when they turn their head right or left. Encourage

them to try to keep their elbow from bending. Children with an STNR may sit back too far when looking up, and bend forward with bent elbows when looking down. Encourage and help them to stay in alignment.

Procedure:

1. Have children get into a quadruped position (on “all fours”).
2. Knees and hips should start at 90 degree angles and arms should be straight and in line with their shoulders.
3. Have children rock back and forth in this position for 30 seconds looking up, 30 seconds looking down, 30 seconds looking right, and 30 seconds looking left.

### **CROCODILE**

Purpose: ATNR integration.

Procedure:

1. Have children lie down on their stomachs on the mat with the right arm and leg bent at 90 degree angles, left arm straight by their side, and left leg straight. Head turns to one side.
2. Instruct children to turn their head to the other side without moving arms and legs. Count to five in that position.
3. Instruct children to keep their head in place but bring the left arm and leg up to the 90 degree bend, and right arm and leg straighten. Count to five.
4. Turn head again, keeping arms and legs as they were. Count to five.

5. Keep head in position, reverse positions of arms and legs. Count to five.
6. Repeat the sequence for 2-3 minutes.

Verbal Cues: "Turn your head, 1,2,3,4,5, down and up, 1,2,3,4,5, turn your head, 1,2,3,4,5, down and up..."

### **Games and Activities Incorporating ATNR and STNR Integration Exercises**

Many standard physical education activities can incorporate ATNR and STNR exercises. Any exercise or movement that involves weight-bearing through the arms will help. The specific integration exercises listed above can be used as part of the warm-up or fitness development. We have found that crocodiles are a good exercise to do at the end of class. All four of the exercises can be used as stations, and crawling can be added into any game or activity that features animal walks or various locomotor skills, as well as obstacle courses. The different crawling skills, wheelbarrow, and lying on a scooter and pulling with the arms can be used in relays. The wall lean can be used any time children are waiting in line next to a wall, such as waiting in the hallway before entering the gym, waiting in line at the drinking fountain, or when lined up to go back to class. Here are some additional games that we recommend:

**Plank Tag:** Purpose: ATNR and STNR integration, core strength, crossing midline.

Directions: Partners get in a plank position on hands and feet facing each other. One tries to tag the other one's

hand. Once tagged swap roles so the other child becomes the tagger.

Variations: Place a cup in front of each child and ask them to tap the cup with alternating hands while in the plank. Integrate academics by having them recite the alphabet or skip count. Another variation is to have the partners reach across and clap right hand to right hand and then left to left instead of trying to tag each other's hand. Steal the bacon can also be done with a partner from the plank (we prefer rubber chickens, but bean bags, yarn balls, etc. can be used for the "bacon.")

**Fitness Challenges:** All students perform crawling skills (forward, backward, sideways, commando, cross crawl) or animal walks (bear, crab, puppy, etc.). On the stop signal call out the exercise to be done (plank, crocodile, rocking horse, push-ups, crab kicks, downward dog, etc.). For example, play music while children crab walk around the area. When the music stops call out "Crocodiles!" After about 30 seconds start the music again and ask the children to bear walk. When the music stops call out "Plank!"

### **Conclusions**

Children who retain primitive reflexes such as the ATNR and STNR often exhibit difficulties in learning, balance, coordination, and behavior. Due in part to cultural changes in parenting and the way children play, there appears to be a growing trend in the number of children starting school with motor difficulties or issues that may or may not be diagnosable. Evidence exists that specific exercises can lead to greater neuromotor maturity which is

linked to readiness for learning, behavior, and physical skills. Physical education is an ideal setting for incorporating reflex integration exercises

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# Salient Trends in the Incorporation of Skills-Based Components in Alabama Health Education Curriculum

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## Introduction

The global competitiveness of U.S. students has been a prevalent and divisive point of contention within the national education system. With the clearly defined link between optimal health and higher academic performance, it is necessary to identify and evaluate strategies that promote sustainable behavior change to improve student health status (Basch 2011; Bradley & Green, 2013). A strong body of evidence asserts social influences, such as peers and teachers, directly influence youth behaviors, providing schools with a unique position to improve student health outcomes due to their reach and primary role in adolescent development (Association for Supervision and Curriculum Development, 2011). Schools have the capacity to lessen the likelihood of students engaging in risky behavior by intervening before unhealthy habits have become ingrained and promoting positive health decisions that influence behavior (Hale, Fitzgerald-Yau, & Vine, 2014).

The ultimate goal of health education is to promote the adoption and maintenance of healthy lifestyles. A critical component in enabling students to achieve this outcome is through the development of health literacy that enables students to comprehend,

appraise, and apply health information to improve and sustain quality of life (Sorenson et al., 2012). Developing student health literacy is valuable for its capacity to significantly contribute to healthy behaviors and lead to improved health outcomes (Nutbeam, 2008). One such approach with the capacity to improve student health literacy is through skills-based health education.

## Skills-Based Competency

Most school health education programs in the U.S. subscribe to a content-based approach with factual emphasis on factuary information (Benes & Alperin, 2016). Health curricula utilizing content-based units and assessment prioritize comprehension acquisition with an underlying theoretical framework of changing knowledge and attitudes to alter behavior (Allensworth, 1994). However, maintenance of long-term behavior change through this approach alone is uncommon (Bandura, 2004). In order to promote lasting behavior change, a health education curriculum must not only provide a factual foundation, but also assist in applying this information in meaningful ways. A skills-based approach emphasizes the acquisition of both knowledge and skills to improve health-enhancing choices in diverse situations and environments.

The theoretical framework for this approach is grounded in the concept of self-efficacy and asserts that individuals who are confident in their ability to perform behaviors are more likely to engage in protective behaviors and refrain from risky behaviors.

Reviews conducted by the Centers of Disease Control and Prevention (CDC) and others demonstrate effective health education curricula that emphasizes functional health information and developing the essential health skills that support adoption and maintenance of healthy behaviors (CDC, 2015). To further assist school health educators in promoting health literacy and competence among students, the Joint Committee on National Health Education Standards (NHES) provided concrete expectations for specific student competency related to health (Tappe, Wilbur, Telljohann, & Jensen, 2009).

Of the eight standards incorporated in the NHES, seven refer to skill-based competencies that are transferable through health content areas. The skill-based NHES components aim to increase student self-efficacy, and ultimately health literacy, through the development of student capacity to analyze influences (NHES 2), access valid information and products (NHES 3), interpersonal communication (NHES 4), decision making (NHES 5), goal setting (NHES 6), practicing behavior (NHES 7), and advocacy (NHES 8). The Alabama Course of Study for Health Education (2009) articulates with NHES standards and mandates health instruction between grades K-12 with the goal of developing health-literate citizens. Due to the importance of skill-based competency to promote sustainable behavior change, evaluating the progress and level of implementation within health education curricula is crucial. Therefore, the purpose of this study was to review the incorporation of skill-based strategies within Alabama

and assess salient changes in reported implementation over time.

## **Methods**

The School Health Profiles (SHP) comprises results of surveys assessing protective factors within the policies and practices of school environment between grades 6-12. Self-administered questionnaires are disseminated biennially to middle and high school principals and lead health education teachers to monitor critical elements of school health policy and practice. Among the components monitored in the SHP is the incorporation of learning strategies articulated with NHES standards addressing skill-based instruction. Data collection utilizes randomized sampling methodology to provide a representative sample for each state, large urban school districts, and territories. Jurisdictions with a response rate of greater than 70% for both principal and health educator questionnaires were weighted to reflect the propensity for participant selection and patterns of nonresponse. Alabama state data obtained the necessary response rate for weighted data biennially from 2008 to 2014.

Data were analyzed for 2008, 2012, and 2014 for Alabama secondary schools due to the consistent nature of the data in regards to weight and equality of questionnaire items. Analyses of short- and long-term changes were conducted utilizing the teacher questionnaire of the SHP for each individual NHES skill-based variable items and an additional item addressing the integration of all skills. Short-term examination assessed significant changes in incorporation as indicated in 2012 and 2014, while long-term changes were examined for 2008 and 2014. Due to the categorical nature of the data, chi-squared tests for homogeneity were utilized to determine statistical associations over time.

## Results

A comparison of reported skills-based components incorporated into high-school health curricula in Alabama for years 2008, 2012, and 2014, as well as the 2014 national median are presented in Table 1. A chi-square test for homogeneity was conducted between year of survey completion and seven skill-based variables based on the NHES as well as the incorporation of all skill-based strategies into the current health curriculum. Short-term analysis between years 2012 and 2014 indicated no significant difference in skill-based incorporation. Long-term analysis between 2008 and 2014 indicated a statistically significant difference in all reported skill-based incorporation in school health curricula. This indicates incorporating strategies for analyzing influences ( $X^2[1, 577] = 8.748, p = .003$ ), accessing valid and reliable information ( $X^2[1, 577] = 4.888, p = .027$ ), interpersonal communication ( $X^2[1, 577] = 14.202, p < .001$ ), decision making ( $X^2[1, 577] = 9.297, p = .002$ ), goal setting ( $X^2[1, 577] = 6.716, p = .01$ ), practicing behavior ( $X^2[1, 577] = 14.159, p < .001$ ), advocating ( $X^2[1, 577] = 10.374, p = .001$ ), and the integration of all seven components ( $X^2[1, 577] = 8.196, p = .004$ ) significantly decreased in Alabama over time.

## Discussion

The aim of this study was to examine secular trends in skill-based strategies within Alabama school health education curricula from 2008-2014. As one of the most critical and powerful means of improving student performance, school health programs must continue to assess and modernize pedagogical and instructional strategies to improve student health outcomes. Teaching content alone allows students to know, yet in terms of making a decision, knowing is not always

sufficient to encourage behavior change. A renewed emphasis on skills will further the capacities of students to not only comprehend, but to appraise and apply health information to more effectively facilitate healthier lifestyles.

Data obtained from the SHP indicate a decline in the percentage of Alabama secondary schools with health education curriculum that addressed specific skills articulated with the NHES from 2008 (90-98%) to 2014 (79-82%). While schools that incorporated all skill components into their health education curriculum also declined from 2008 (74%) to 2014 (70%), the change was much less salient. Although the majority of surveyed schools in the most recent iteration of the SHP currently address specific skills, this incorporation is significantly below the national median (87-94%). Of additional concern is the reduced prevalence of Alabama schools indicating incorporation of all skill-based NHES components. According to the Alabama Course of Study for Health Education (2009), health education instruction must focus on the “application and mastery of developing health-enhancing skills” by allowing students to “obtain, interpret, and apply” (p. 28). These results may be indicative of misalignment between the concrete expectations for health education and actual implementation in practice. Additionally, this reduction in skills-based instruction has also coincided with a decrease in Alabama school health teachers whose professional emphasis related to health education and an increase in instructors whose experience relates to other content areas such as physical education and counseling. School health educators must be accomplished facilitators to make a skills-based approach impactful and additional training may be required to transfer these skills from theory into practice.

Limitations within the SHP were present. Sampling of included SHP schools only included public high

schools, with policies and practices of private and K-6 grade levels excluded. Skills-based curriculum data were assessed as an aggregate of middle and high school data which could mask differences between lower secondary and secondary school levels. Additionally, data presented in SHP was the result of self-report from school principals and health education instructors. Finally, the data in SHP does not provide an in-depth analysis of the extent in which skill-based strategies are incorporated into curriculum, teacher assessment, or student mastery of skills.

Future research should seek to address the aforementioned limitations of the current study. Ascertaining school and instructor familiarity and competence incorporating NHES and Alabama Course of Study mandates is necessary to further elucidate potential weaknesses and gaps in state health education instruction. Additionally, further examination of instructor assessment strategies and student outcomes based on mastery of learning skills will further explicate the status of Alabama school health instruction and provide a factual basis on which improvement strategies can be developed to safeguard the health of Alabama youth.

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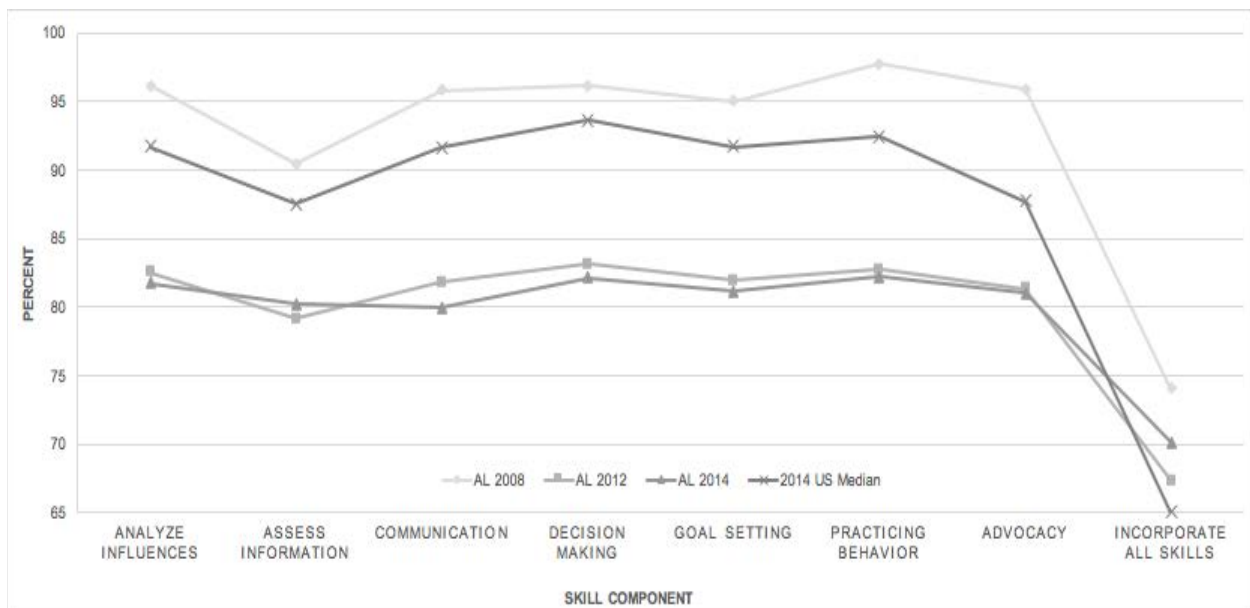
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Figure 1. Percentage of Alabama secondary schools with a health education curriculum incorporating NHES skills between 2008-2014 and the 2014 national median.





# When Should a High School Baseball Player Sign a Professional Contract? A Cost-Benefit Analysis

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## Introduction

Elite baseball players face a potentially life-altering decision following their senior year: should they sign a professional contract if drafted or choose to attend college. Rules about what a player can do differ based on the choice to sign professionally, attend a four-year college, or attend a two-year college. The decision boils down to a cost-benefit analysis for the player. Is it more beneficial to take the immediate pay of a professional athlete, or attend college? The problem in answering this question is that 18-year olds are not always mature enough to make an informed decision and the pertinent information to make the best decision is not always readily available. The purpose of this paper is to provide a cost-benefit analysis of whether a high school baseball player should sign a professional contract or choose to attend college based on their draft position.

## Literature Review

### The Major League Baseball (MLB) Draft

If drafted out of high school, a player can choose to sign a professional contract or decline in favor of attending college. If they sign, they relinquish their amateur status and will no longer be eligible to play collegiate baseball. If

they decline to sign a professional contract, they have two options for playing collegiate baseball: a two-year junior college or a four-year college. The decision between these two is a very important one. If a player chooses junior college they will be eligible the next year to be redrafted.

If they choose a four-year college they are not eligible to be drafted until after their junior year. These rules apply to players from the United States, Canada, and Puerto Rico.

The more options a player has, the greater leverage they typically wield. Garmon (2013) found that high school players are the least likely to sign, whereas college seniors are the most likely to sign as they have the fewest baseball-related options at that point. Additionally, high school players receive signing bonuses \$110,000 higher than their junior-year college counterparts. The negotiating power is an important aspect because in terms of success at the Major League level no significant differences exist between high school and college players (Caporale & Collier, 2013).

An additional consideration recently added to the draft system is the 2012 implementation of the "Signing Bonus Pool." It gives each team a predetermined amount of money to spend on signing bonuses for the first

10 rounds, as well as including any player signing for more than \$100,000 after that. Teams exceeding their pool are subject to financial penalties and the loss of future draft picks (Mayo, 2011). The effect of these changes could impact high school players the most through the stipulation that any signing bonus exceeding \$100,000 after the 10<sup>th</sup> round counts against the pool. The leverage enjoyed by high school players in the past could allow them to negotiate higher signing bonuses even in lower rounds. This leverage may not matter if a team has run out of its bonus pool allotment.

In a similar draft study, Winfree and Molitor (2007) examined the value of attending college and a professional contract for players drafted between 1965 and 1980. They focused on estimated future earnings and concluded it is advantageous for players drafted in the first 11 rounds to sign a professional contract, and after that players have a higher probability of making the Major Leagues if they attend college. Although their results add value to the body of knowledge, the draft structure has changed significantly and their results are heavily based on projections. Using signing bonuses represents the only guaranteed money that a player receives when they sign, and are therefore the only monetary certainty a player has – unlike estimated earnings. Player's minor league salaries can hardly be taken into consideration as the average minor league player makes less than the average fast food worker, and falls well below the federal poverty level (Berg, 2014).

### **The Value of Attending College**

The average baseball player drafted out of high school only plays

4.38 seasons of professional baseball (Winfree & Molitor, 2007), so reality is that a long and profitable MLB career is not realistic. Therefore, examining the value of a college degree is prudent. A college degree should be assessed in both its benefits and costs, as costs are typically underreported. Many students attend, and take on the burden of paying for college, without actually reaping the benefits of a degree. This study examines the net present value of a college degree in order to compare it to average MLB signing bonuses.

Although there is some dissent, many have found a college degree to be financially worthwhile. Greenstone and Looney (2012) found college graduates are 20% more likely to be employed than high school graduates, and that the return on investment of a college degree is higher than that of stocks, bonds, and real estate. Carnevale (2011) found the unemployment rate is four times higher for high school graduates. Lewin (2010) found the 2008 median income of full-time workers with a bachelor's degree was \$21,900 more than a high school graduate counterpart. In the decade spanning 1999-2009, the earnings of an adult with a bachelor's degree rose from 75% to 84% greater than a high school graduate (Carnevale, Rose, Cheah & Georgetown, 2011). While important, these findings still lack a true valuation of a degree, which is needed to compare to MLB signing bonuses.

Four different studies examining the net present value of a college degree are presented in order to better investigate the differences in choosing to sign a professional contract and attend college. They are each framed as the increased value of a college degree compared to a high school degree. The studies determined the value of a

college degree to be: \$1,000,000 (Carnevale, 2011), \$570,000 (Greenstone & Looney, 2011), \$420,000 (Oreopoulos & Petronijevic, 2013), and \$121,539 (Winkler, 2009). The range in valuations characterizes the difficulty in placing a value of a college degree.

### **Methodology**

The principal source of data for the present study was the Baseball America's Draft Database for each draft from 2002-2013, which includes player signing bonuses. The data was originally limited to the first ten rounds of the draft based on the recommendation of Garmon (2012). During data collection it became apparent that the average signing bonus would not consistently surpass the conservative net present valuation of \$121,539, so data collection was extended to as many rounds as necessary to meet this breakpoint. Important to note is that the MLB draft contains supplemental picks after the first, second, and third rounds which differ in quantity each year based on compensation for losing free agents. Typically there are not enough supplemental picks to justify calculating averages for them as their own round. Therefore, supplemental picks were combined with the round that bears their name: First Round Supplemental is calculated with other First Round picks. Based on yearly differences needed to hit the desired breakpoints, the total amount of draft picks observed in a given year falls between 307 and 424.

To satisfy the research question, only players drafted out of high school were examined. For each round of each year, average signing bonuses were calculated. This allowed for the comparison between round averages and the four different net present values

of a college degree. The final product is four breakpoints in each draft representing the round in which the average signing bonuses fall below each of the four valuations of a college degree.

### **Results**

The results of the study are shown in Table 1. To reiterate, only the signing bonuses for each player are used in the present examination because the bonuses are the only guaranteed money on which a drafted player can count. Each breakpoint is represented by the round in which the average signing bonus fell below the net present value of a college degree. In order to expect a signing bonus greater than or equal to a specific valuation, a player would have to be drafted earlier than the round identified as the breakpoint.

The highest and most liberal estimate of the net present value of a college degree, \$1 million, shows very little variation in the results. Every year, except for 2011, the breakpoint has fallen in the 2<sup>nd</sup> round; meaning a player almost certainly had to be drafted in the first round in order to ensure a signing bonus of over \$1 million. The results indicate a little more fluctuation in the \$570,000 breakpoint as it falls between the 2<sup>nd</sup> and 5<sup>th</sup> rounds. The third breakpoint of \$420,000 falls between the 3<sup>rd</sup> and 8<sup>th</sup> rounds, indicating more fluctuation as well. This also represents the first discernable pattern - from 2002-2005 this breakpoint fell in the 4<sup>th</sup> round, then from 2008-2011 the breakpoint did not come prior to the 6<sup>th</sup> round. At the most conservative of the valuations, \$121,539, the breakpoints fall anywhere from the 8<sup>th</sup> to 13<sup>th</sup> rounds. Additionally, there is a fairly observable pattern as

the breakpoint fell in the 8<sup>th</sup> round from 2002-2005, and since then have not come earlier than the 10<sup>th</sup> round.

The data for the present investigation indicates that using a lower valuation of a college degree would fundamentally change the decision of whether or not to sign a professional contract. For example, in 2002 a player would have to be drafted in the top eight rounds in order to expect a signing bonus exceeding \$121,539. Only twelve years later, a player would have to be drafted in the top thirteen rounds in order to expect a signing bonus that surpasses the same number. As a result, an additional 150 players have eclipsed that breakpoint in twelve years.

### **Discussion**

#### **Impact of the Draft**

Average signing bonuses have increased overall for players over the course of the study, but the recent modifications to the draft could change that. This change may be the reason why none of the breakpoints from 2012 or 2013 moved later in the draft than their positions in 2010 or 2011, the last two years before the bonus pool. In fact, half of the breakpoints occurred earlier, some to levels not observed since 2006. The inability of teams to spend as much as they want on signing bonuses may end up reducing the average signing bonus in order to stay within their allotted bonus pool. Under the new signing bonus pool format, teams are being forced to be more strategic with their draft strategy.

#### **Signability**

A term often used in baseball circles to assess the likelihood of a drafted player actually signing a contract is “signability”. Players are regularly

drafted based on their signability in relation to their talent level. Spurr (2000) argued that signability represented a critique to the assumption that baseball players are drafted in the order of their expected baseball performance because of the, “uncertainty as to whether the player will sign with any club or return to school instead, or even take a job unrelated to baseball” (p.68). He adds that signability became more important in the early 1990’s, which means it would not have been as important to previous studies such as Winfree and Molitor’s (2007) which examined an earlier timeframe. This creates a situation where an MLB team has to gauge, through talking with a player, their family and their representation, what it was truly going to take a sign a player. If a team feels they cannot reasonably sign a player they may pass them up for a less talented player they can sign.

#### **Impact of the Plan**

A potentially powerful component influencing the decision of whether to go pro or attend college, which is unable to be factored into the results regarding signing bonuses, is The Major League Baseball Scholarship Plan, or simply, “The Plan”. Under The Plan a baseball player is afforded the opportunity to start a professional baseball career immediately following high school yet still have assurances about pursuing a college degree. If negotiated into a player’s contract, The Plan holds the team that originally signs a player responsible for paying their future educational costs (either entirely or at a partially negotiated rate) if they meet the agreed-upon obligations (Major League Baseball, 2014). The Plan can be negotiated as part of a deal, but it is not

mandatory. There is little to no information readily available regarding the rate of usage of The Plan in MLB contracts, so it is difficult to assess its value. But understanding that it is an option available is important for the high school player that wants to earn a college degree.

One can argue that college will always be an option but there is only a finite amount of time available to play professional baseball. If the opportunity presents itself and a player knows they will have college paid for regardless of timing, performance, or injury, beginning a professional baseball career out of high school is going to seem a more attractive option. Not only has The Plan been used successfully by both players and teams to get what they want, it may represent a way to work within the new system.

### **Individual Differences**

It is important to note that the results of this study may mean absolutely nothing to a drafted player. Some players have no aspirations of a college education and simply want to play baseball or they may not have the grades to play baseball at the collegiate level. These players are likely to sign a contract whether or not it outweighs the value of an education. Alternatively, there are players who will value education so highly that it would take a signing bonus which is simply out of the question in order to sign them. These players are likely to attend college even if they are offered signing bonuses that would make financial sense in comparison to the value of a college degree. There could also be heavy family pressure swaying a player one way or the other.

At the end of the day, a high school player must make a decision that he feels is best for himself and his family. The information presented in this study should aid in making that decision as it is imperative that a player and their family have an understanding not only of the signing bonus offer, but also the value of a college degree and their options for pursuing a college education when it comes to negotiating the player's future. The drafting team and even representation for the player may not always present the best options based on their own preferred outcomes. The final outcome should represent what the player wants to do, and should optimize that choice based on all the factors that play into that decision discussed in this study.

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Table 1

MLB Draft Round Breakpoints for High School Players, 2002-2013

	\$1,000,000	\$570,000	\$420,000	\$121,539
2002	2nd	3rd	4th	8th
2003	2nd	3rd	4th	8th
2004	2nd	4th	4th	8th
2005	2nd	3rd	4th	10th
2006	2nd	3rd	5th	13th
2007	2nd	2nd	3rd	13th
2008	2nd	3rd	6th	12th
2009	2nd	4th	8th	13th
2010	2nd	5th	7th	13th
2011	3rd	4th	6th	12th
2012	2nd	3rd	5th	11th
2013	2nd	4th	5th	13th



**ASAHPERD Research Poster Abstracts  
Fall Conference, November 6, 2016**

**Title: Predictors of Childhood BMI Percentiles in the Fragile Families and Child Wellbeing Study**

Authors: Donna O. Burnett, PhD, RDN, Auburn University; Retta Evans, PhD, MCHES, The University of Alabama at Birmingham

**Purpose:** The purpose of this study was to identify significant predictors for Child BMI Percentiles in the Year 9 Wave of the Fragile Families and Child Wellbeing Study. Researchers hypothesized that variables identified in the CDC Adverse Childhood Experiences Study (ACE) identified to represent of child abuse or neglect that were statistically associated with adult obesity would be significantly correlated with Child BMI Percentiles.

**Methods:** Children participating in the Fragile Families Study Year 9 Wave reportedly were interviewed according to study protocol. Variables used in the Fragile Families Study were reviewed for possible inclusion in the present study; those overlapping with variables used in the ACE study were identified and corresponding data used in the present study for MLR analysis. Additional variables from the Fragile Families Study were used in analysis.

**Results:** MLR was run using Child BMI Percentile as the DV ( $n = 1030$ ;  $R^2 = .094$ ;  $F = 8.693$ ,  $p < .001$ ). IVs were: BioMomBMI, DadExpressesLove, DadAbusesMom, DadControlsMom, ChildWorried/Anxious, ChildDestructive, ChildFeelsCloseSchool, ChildBulliedSchool, ChildStaysOnTask, ChildReportsMom/DadYell/Spank. The best predictor of Child BMI Percentile was BioMomBMI ( $\beta = .297$ ,  $p < .001$ ). Other significant predictors were: DadControlsMom ( $\beta = .090$ ,  $p = .007$ ), ChildFeelsCloseSchool ( $\beta = -.069$ ,  $p = .024$ ), and ChildBulliedSchool ( $\beta = -.064$ ,  $p = .43$ ). Effect size was small; however, a validation subset was used in analysis.

**Conclusions:** None of the ACE study variables were significant predictors of Child BMI Percentiles. However, in addition to BioMomBMI, significant predictors were identified related to the home and school environment.

**Title: Fast Food Consumption of Collegiate Athletes and Non-Athletes in Alabama**

**Authors:** Amanda C. Knapp, University of South Alabama; Shelley L. Holden, Ed.D., University of South Alabama; Brooke E. Forester, Ph.D., University of South Alabama; Henry N. Williford, Ed.D., Auburn University Montgomery

**Purpose:** The purpose of this study was to determine if fast food consumption is higher in college athletes or non-athletes.

**Methods:** One hundred seventy-five college students from a Division I university in Alabama participated in the study. Participants were administered the Michigan Behavioral Risk Factor Survey. Surveys were administered at the on-campus cafeteria, student center, library, and in physical education activity courses. Participants also provided their gender, age, monthly fast food intake, GPA, height and weight.

**Results:** Correlation matrices found significant relationships between fast food and college athlete  $r = -0.159$ ,  $p = .036$ . That is, students who were on an athletic team consumed significantly more fast food than non-athletes.



**Conclusion:** Athletes consumed significantly more fast food than non-athletes. This is an interesting finding considering the impact that proper hydration and nutrition has on athletic performance. Future research could examine this finding to see whether it is apparent at other NCAA Division I institutions and which, if any, team(s) are affected.

**Title: The Impact of VO<sub>2MAX</sub> on High Intensity Interval Training**

**Authors:** Fabien S. Gutierrez, Huntingdon College; Michael R. Bamman, Ph.D., Huntingdon College

**Purpose:** High Intensity Interval Training (HIIT) has been shown to increase VO<sub>2MAX</sub> at a higher rate than continuous long distance running, while the physiological mechanisms responsible for the efficiency in HIIT training have been found to be anaerobic in nature. Studies of HIIT training programs have shown significant increases in lactate threshold as well as VO<sub>2MAX</sub>. The purpose of this study was to the interrelationship between VO<sub>2max</sub> and efficiency in a HIIT workout. The goal of this study was to use two tests to identify any possible correlation between a subject's VO<sub>2MAX</sub> and efficiency in a HIIT workout.

**Methods:** Subjects were male varsity Division III football athletes. Each subject (n=17) completed the Stepping Bench Test which established predicted VO<sub>2MAX</sub>. The second test was High Intensity Interval Training workout labeled as The Lucky Triple 777's in which the subjects performed 7 repetitions and 7 rounds of 3 exercises for time and the following exercise were: squat thrusters, sumo dead lift high pulls and flash burpees. The HIIT training session was completed as a timed trial.

**Results:** Body weight for the sample was 82.4kg±2.45. Mean predicted VO<sub>2MAX</sub> for the sample was 44.85±12.38 ml/kg/min which rates as "good" cardiovascular fitness. Mean time to completion of the HIIT training session was 477.60±93.60sec. Results showed a moderate negative correlation between VO<sub>2MAX</sub> and HIIT efficiency as measured by The Lucky Triple 777's times (44.85±12.38ml/kg/min vs 477.6±93.6sec; r = -0.46; p > 0.05). In this sample of Div III athletes there was an inverse relationship between VO<sub>2max</sub> and HIIT efficiency. While VO<sub>2MAX</sub> has been shown to increase (among other aerobic and anaerobic variables) with HIIT exercise in the literature, in this sample the efficiency of HIIT performance was negatively impacted by subjects' VO<sub>2MAX</sub>.

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# Jump Rope for Heart & Hoops for Heart



Anita Davis and Valerie Yarbrough are your state coordinators for Jump and Hoops! Anita and Valerie teach at Huntington Place Elementary in Tuscaloosa County. ASAPERD is fortunate to have these dedicated professionals take on this role. As state coordinators, Anita and Valerie are the liaisons between ASAPERD and all the local Jump Rope for Heart and Hoops for Heart coordinators in Alabama's schools. Among other responsibilities, they assist in planning sessions for the Fall Conference and Spring Conference and encourage other teachers to conduct events in their schools.

Interested in signing up to hold an event? Contact Anita ([acdavis@tcss.net](mailto:acdavis@tcss.net)) or Valerie ([vyarbrough@tcss.net](mailto:vyarbrough@tcss.net)) for more information. When you complete a Jump Rope for Heart or Hoops for Heart event, you provide future generations with the knowledge and tools they need to stay heart healthy for life. Jump Rope for Heart and Hoops for Heart proceeds go to the American Heart Association to be used for fighting heart disease, providing educational materials and public education about heart disease, the nation's #1 killer. Sign up today and you will receive materials on how to conduct an event. AHA provides many incentives for both the coordinator and the participants who champion this great cause.

In addition, ASAPERD provides coordinator incentives as well such as **reduced membership** fees (\$10 for one coordinator per school event – a savings of \$30), complimentary **lunch** on Monday at the Fall Conference, and an **opportunity to apply for a \$500 grant** for your school. AND, because of your volunteer efforts and the time it takes to complete a quality event, ASAPERD will award to teachers completing a Jump Rope and/or a Hoops for Heart event **6 CEU Hours!**

If you are already a Jump Rope for Heart or Hoops for Heart Coordinator, *THANK YOU!* If not, sign up today. Your students will benefit from the experience and so will you!



**Jump Rope for Heart and Hoops for Heart 2016 Coordinators of the Year**  
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