ASAHPERD Journal

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About the Cover:
The combination of 2016 being Leap Year and leap being an action word led to this year's presidential theme *LEAP Fearlessly*. "The Radical Leap" by Steve Farber is centered on leading with Love, Energy, Audacity, and Proof - LEAP. The idea is that love generates boundless energy, inspires courageous audacity, and requires proof. Leading isn't about YOU; it is about YOUR IMPACT ON OTHERS. This philosophy has since served as the basis of President Mabrey's leadership style professionally and personally. It likens to the old adage that 'people don't care how much you know until they know how much you care.'

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Policy Statement

The ASAHPERD Journal is a blind, peer reviewed journal and is the official publication of the Alabama State Association for Health, Physical Education, Recreation, and Dance. The Journal is published two times annually, in the fall and in the spring. Manuscripts, photos, and news items are invited and should be submitted in accordance with the Author's Guidelines found in this document. The authors' opinions are their own and do not necessarily reflect the attitude or views of ASAHPERD, its officers, or the editors of the Journal.

A Note from the Journal Editors

Jean Ann Helm Allen & Lee Renfroe

Hello fellow ASAHPERD colleagues and friends! We are excited to be the new co-editors for the ASAHPERD journal! It is an honor to follow in Lynne Edmondson's editorial footsteps. She did an outstanding job for many years and we know we speak for all the membership when we say that we greatly appreciate her dedicated service and time spent bringing an informative, professional journal to the membership.

We would like to take this opportunity to introduce ourselves and share with you our vision for the future of the ASAHPERD journal. We are both faculty at the University of North Alabama. When the announcement came out soliciting for a new journal editor, we both emailed Donna, offering to fill the position but without either one knowing that the other one was volunteering. When Donna found out that we both expressed an interest in the position, she called Tom Coates to discuss the idea of co-editors and he supported the idea, knowing that we enjoy and work well together.

When we became co-editors, we were given the opportunity to restructure the format and generate some new ideas for a fresh direction. We were excited to have this opportunity and have come up with some new ideas that we think will provide for an interesting change in articles.

First of all, we decided that since so many of you are teachers, we would change the release time on the journal to fall and spring so that a summer journal would not be released when many of you are on summer break.

Second, we would like to broaden the scope of the submissions to meet a wider range of interests. Research articles are always valued in a peer journal but we also feel that a variety of offerings may be more beneficial since our membership has a broad base. We are asking for article proposals that include research but we are also interested in historical, best practices, trendy teaching techniques/activities…. we are open to any professional writing that our membership or interested parties see as beneficial to the journal readership.

Lastly, we would like to solicite for additional reviewers. We have had outstanding reviewers to date, and we hope that they will continue to support our efforts. In addition, we would also like to see some new "faces" apply and share their expertise in the review process. Please contact us if you would like to apply to be a journal reviewer. The process is not time consuming and most of us who have participated in the process have really enjoyed the experience.

We are excited to serve as your editors in the upcoming year and with your help, we look forward to putting together the best journal ever!

Happy submissions,

Jean Ann and Lee

Publishing in the ASAHPERD Journal

The ASAHPERD Journal is looking for articles that communicate theory, research and practice in an ASAHPERD (health, physical education, recreation, or dance) discipline. Acceptable topics include teaching techniques; research; Alabama state resources and services; meeting Alabama state or national standards; philosophy; advocacy and policy appropriate for Alabama; and reviews of web resources, books, and audiovisuals.

Manuscripts must meet the most current APA Guidelines, be submitted electronically as a word document in portrait configuration (not landscape), include an abstract, and not exceed 2500 words or 5 pages single-spaced, Arial, 12 font, and fully justified. Headers should be centered and sub headers left justified. Do not insert any extra blank spaces or special formatting. The current schedule for publication is spring and fall. Acceptance of articles for publication is ongoing. The abstract should be 50 words or less. Please include a cover letter with your credentials (student or faculty and your university affiliation or place of employment) and stating the article is not being considered for publication elsewhere. Contact asahperd.journal@gmail.com for more information.

Pre-professional undergraduate and graduate student submissions must be accompanied by a letter on official University letterhead from a faculty sponsor (even if NOT listed as a co-author) that they have reviewed the paper and vouch that it is in a condition worthy to be submitted to a peer-reviewed journal. We are requesting faculty sign and provide their contact information for an undergraduate or graduate student to ensure that the work is of high quality and was produced as part of a guided experience.

Interested in Reviewing for the Journal?

Would you be interested in making a professional contribution to our organization from the comfort of your own home? Do you enjoy reading the latest research going on in our field? Would you like to be a part of the journal process? If so, please apply to be an ASAHPERD journal reviewer TODAY!

Qualifications:

- Must be a current ASAHPERD member and maintain ASAHPERD membership
- Must have a terminal degree in an ASAHPERD field (i.e. health education/health promotion, physical education, adapted physical education, recreation, athletics/ coaching, exercise science, etc.)
- Have read and agree to the roles and responsibilities of an ASAHPERD Journal Reviewer

If interested access the link for the journal reviewer application here or contact the journal co-editors at **asahperd.journal@gmail.com** for more information.

Meet ASAHPERD's Jump Rope for Heart & Hoops for Heart Coordinators

Anita Davis & Valerie Yarbrough

Anita Davis and Valerie Yarbrough are your state coordinators for Jump and Hoops! Anita and Valerie teach at Huntington Place Elementary in Tuscaloosa County. ASAHPERD is fortunate to have these dedicated professionals take on this role. As state coordinators, Anita and Valerie are the liaisons between ASAHPERD 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) or Valerie (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, ASAHPERD provides coordinator incentives as well such as **reduced membership** fees ($5 for one coordinator per school event – a savings of $25), 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, ASAHPERD 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!

Congratulations to the 2015-2016 Top Money Raisers

Jump Rope for Heart

Fairhope Elementary School	$26139.09	Cathy Hudson
Paine Primary School	$26134.94	Scott Burnett
Edgewood Elementary School	$23697.07	John Dorough

Hoops for Heart

Homewood Middle School	$15244.28	Robert Gibbons
UMS-Wright Preparatory School	$11600.66	Terry Canova
Demopolis Middle School	$ 7758.89	Jesse Bell

Jump/Hoops Combined

Creekside Elementary School	$18805.82	Mary Mitchell
Mill Creek Elementary School	$17612.35	Jennifer Klein
Vestavia Hill Cahaba Heights	$14485.11	Jeremy Andrews

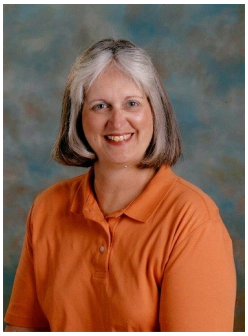
SHAPE America and the American Heart Association collaborate on the Jump Rope For Heart and Hoops For Heart programs.

Congratulations to the 2016 ASAHPERD Award Recipients

Honor Award
Retta Evans
UAB

ASAHPERD Service Award
Joy Lucas
Faulkner University

Administrator of the Year
Edward Drozdowski
Wares Ferry Elementary



Elementary Teacher of the Year
Ann Trotter
T.R. Simmons Elementary

Middle School Teacher of the Year
Laura Prior
Tuscaloosa Magnet School

Health Educator of the Year
Shelley Holden
University of South Alabama

Ethnic Minority Award
Natasha Satcher
University of West Alabama

Gathering • Growing • Giving
WALKER AREA
COMMUNITY FOUNDATION

Angie Nazaretian Lay Leader
Walker Area Community Foundation, Paul Kennedy, CEO

Hoops for Heart Coordinator
Anita Davis
Huntington Place Elementary

Recreation Professional
Patrick Shremshock
University of North Alabama

Jump Rope for Heart Coordinator
Debra McDonald
Richland Elementary

Willis J. Baughman Award
Outstanding Majors Club
UAB - FLAME

Outstanding Future Professional
Danielle Mason, AUM

Exploring the Relationship Between Use of Nutrition Label Information and Risk for Eating Disorders Among Adult Females in Alabama

Katy Smith[1], M.S. ,Shelley L. Holden[1], Ed.D., Sheryl L. Chatfield[2], Ph.D.

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Exploring the Relationship Between Use of Nutrition Label Information and Risk for Eating Disorders Among Adult Females in Alabama

Lifetime prevalence rates for eating disorders of all types among US females in the United States are as high as 5.9 %, roughly twice the rate of males (Hudson, Hiripi, Pope, & Kessler, 2007). McCarthy (1990) suggested that a cultural ideal of thinness for women, which is often below the actual average weight for women in a given culture, influences body dissatisfaction at a higher rate among women than men. Eapen, Mabrouk, and Bin-Othman (2006) assessed adolescent female research participants in the United Arab Emirates, and concluded that a thin body was considered desirable, and that participants frequently believed their ideal weight should be less than their current weight. Jones, Bennett, Olmsted, Lawson, and Rodin (2001) asserted disordered eating attitudes and behaviors become increasingly common in older teens and young women. According to Striegel-Moore and Bulik (2007), the single best predictor of developing an eating disorder is being female.

Additional risk factors for eating disorders in females identified by researchers include the tendency to diet to lose weight, in particular at severe levels (Patton, Selzer, Coffey, Carlin, & Wolfe, 1999) and reported low self-esteem, inadequate social support, and negative body image (Ghaderi & Scott, 2001). Favaro, Ferrara, and Santonastaso (2003) suggested other correlates with eating disorders that include being overweight or engaging in atypical eating patterns, such as binge eating or adhering to low calorie diets.

A strategy that is used to help individuals manage weight through food intake is the provision of nutritional information via food labels, which are required by an increasing number of countries including both the United States and the European Union (European Food Information Council [EFIC], 2014). According to Grunert, Wills, and Fernandez-Celemin (2010), UK consumers were most likely to report use of labels to identify fat, sugar, and calorie information. Campos, Doxey, and Hammond (2011) conducted a systematic review of 120 international research studies and concluded the prevalence of self-reported label use was generally high, with the greatest percentage at 82% (New Zealand) and

the lowest at 47% (European Union). Label use in the US was reported at 75%. The authors concluded females were more likely to report that nutrition labels influenced their food choices, and that consumers tended to look more closely at nutrients they wish to avoid. Other researchers (e.g., Godwin, Speller-Henderson, & Thompson, 2006; Rasberry, Chaney, Housman, Misra, & Miller, 2007) suggested that females have greater nutritional knowledge and more favorable attitudes, and report more frequent use of label information than men. However, in general, according to the EFIC, "little is known about whether consumers make long-term healthier food choices as a result of having used nutrition information" (p. 9). This suggests that researchers have incomplete understanding of individuals' motivation for using label information.

Given that females are both more likely than males to experience an eating disorder and to report use of nutritional labels, we proposed this research to explore the potential relationship between these two behaviors. The purpose of this paper is to present findings from a survey research project designed to assess to what extent females' reporting of use of nutritional label information might predict potential for experiencing an eating disorder.

Methods

This survey research project was conducted over the course of two months in the state of Alabama. A university institutional review board approved the project prior to the initiation of data collection. One hundred and eleven participants were recruited by purposive sampling. Selection criteria included that participants must be adult (over age 19), female, and able to read and understand English. Participants were provided with an information sheet and description of the project and were given assurance that no personally identifying data would be requested.

The data for this research include participant scores on the Eating Attitudes Test (EAT-26) and a single multiple-choice self-assessment of the frequency with which participants consulted nutritional labels. We also asked participants to provide age and racial/ethnic identification.

The EAT-26 was originally developed to identify symptoms of anorexia nervosa, has demonstrated adequate psychometric properties and is a frequently used instrument in screening for other eating disorders (Garner & Bohr, 1982; Orbitello et al., 2006). The EAT-26 was found appropriate for use to identify risk for binge eating disorder (BED) and an eating disorder or eating disorders not otherwise specified (EDNOS) although adjustment to the cut off score is recommended, in particular when the instrument is used with free living populations (Orbitello et al., 2006).

Results

The survey was administered in person in pencil and paper format to participants; all 111 participants completed the survey. Eighty-two participants self-identified as White; 26 self-identified as Black, and the remainder self-identified as Latino. Ages of participants ranged from 19 to 82 with mean age of 26.31 (SD = 12.06).

A small number of participants reported reading nutrition labels 100% of the time or never, resulting in a non-normally distributed outcome variable. Because of this and because our

interest was in assessing the strength of the relationship between potential for eating disorder and self-reported label use, we collapsed the label use categories into two to facilitate use of a logistic regression model. We considered those who reported using nutrition labels 50% or more of the time as nutrition label users (n = 67) and those who reported using labels less than 50% of the time as non-users (n = 44).

When we applied the EAT-26 authors' recommended cut off score of 20 to determine risk for eating disorders, 11 participants met or exceeded this score. Using the lower recommended cut off of 11 to determine risk for eating disorder in free living populations, (Orbitello et al., 2006), 33 participants had scores that suggest potential risk for anorexia nervosa, BED, or EDNOS.

We conducted logistic regression analysis to assess the relationship between EAT-26 scores (RISKSCORE) and nutrition label user category. Because of the multiple cut off points suggested in prior research, we treated RISKSCORE as a continuous variable. The -2 log likelihood of the null model was 149.08; inclusion of our predictor decreased this measure to 136.65. Coefficient values, confidence intervals, and calculated probability values for the model are shown in table 1.

According to our model, for every one unit increase in EAT-26 score, the log odds of reading nutrition labels increases by 13%. All statistical analyses were conducted using R version 3.2.2 (R Core Team, 2015). Additional analysis detail, including R code, is available by contacting the authors.

Discussion

The results of our statistical analysis of survey responses from 111 adult females suggest there might be a relationship between use of nutritional labels and having risk factors for eating disorders. In their review, Campos et al. (2011) concluded that individuals who review labels might do so to identify things they wish to avoid, which suggests that label review could be a facilitator for eating disorders that are associated with desire to reduce calories or fat to sometimes unhealthy levels.

Limitations of this research include relatively small, homogenous sample, however, our interest was exploratory at this stage and participants represented the population of interest. We also relied on participants self report, although as our interest was not directed toward one specific one eating disorder, it would be difficult to validate self-reported data through use of one or a small number of objective measures. Grunert et al. (2010) suggested based on direct observation in combination with self-report data that participants might overestimate their tendency to review labels, perhaps due to social desirability. We hope by using a two-category split to have eliminated some of the impact of overestimates, presuming the general tendency to overestimate would be conservative rather than extreme.

These findings represent a starting point for further exploration into use of nutritional labels. Given the association between eating disorders and individual factors, including level of self-esteem, or environmental factors, including level of social and emotional support available, further research might incorporate assessments of these actors as well.

References

Campos, S., Doxey, J., & Hammond, D. (2011). Nutrition labels on pre-packaged foods: A systematic review. *Public Health Nutrition, 14*, 1496-1506.

Eapen, V., Mabrouk, A. A., & Bin-Othman, S. (2006). Disordered eating attitudes and symptomatology among adolescent girls in the United Arab Emirates. *Eating Behaviors, 7*, 53-60. doi: 10.1016/j.eatbeh.2005.07.001

"Eating Disorder Help and Information." *RSS 20.* (2014, March 11.) http://www.mirror-mirror.org.

European Food Information Council (2014). Global update on nutrition labeling. Brussels, Belgium: Authors. Retrieved on August 22, 2015 from http://www.eufic.org/upl/1/default/doc/globalupdateexecsumjan2014%2013%20jan%202014_finalwebsummary.pdf

Favaro, A., Ferrara, S., & Santonastaso, P. (2003). The spectrum of eating disorders in young women: A prevalence study in a general population sample. *Psychosomatic Medicine, 65*, 701-708. doi:10.1097/01.PSY.0000073871.67679.D8

Garner, D.M. & Bohr, Y. (1982). The EAT: Psychometric features and clinical correlates. *Psychological Medicine, 12*, 871-878. doi: 10.1017/S00332917000049163

Ghaderi, A., & Scott, B. (2001). Prevalence, incidence and prospective risk factors for eating disorders. *Acta Psychiatrica Scandinaviva , 104*, 122-130.

Godwin, S. L., Speller-Henderson, L., & Thompson, C. (2006). Evaluating the nutrition label: Its use in and impact on purchasing decisions by consumers. *Journal of Food Distribution Research, 37*, 76-80.

Grunert, K. G., Wills, J. M., & Fernandez-Celemin, L. (2010). Nutrition knowledge, and use and understanding of nutrition information on food labels among consumers in the UK. *Appetite, 55*, 177-189. doi:10.1016/j.appet.2010.05.045

Hudson, J.I., Hiripi, E., Pope, H.G., & Kessler, R.C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry, 61*(3), 348-358.

Jones, J. M., Bennett, S., Olmsted, M. P., Lawson, M. L., & Rodin, G. (2001). Disordered eating attitudes and behaviors in teenaged girls: A school-based study. *Canadian Medical Association Journal, 165*, 547-552.

Laz, H.L., Rahman, M., Pohlmeier, A.M., Berenson, A. B. (2015). Level of nutrition knowledge and its association with weight loss behaviors among low income reproductive-age women. *Journal of Community Health, 40,* 542-548.

McCarthy, M. (1990). The thin ideal, depression and eating disorders in women. *Behavioral Research and Theory, 28*, 205-215.

Orbitello, B., Ciano, R., Corsaro, M., Rocco, P.L., Taboga, C. . . . , & Balestrieri, M. (2006). The EAT-26 as screening instrument for clinical nutrition unit attenders. *International*

Journal of Obesity, 30, 977-981. doi: 10.1038/sj.ijo.0803238

Patton, G. C., Selzer, R., Coffey, C., Carlin, J. B., & Wolfe, R. (1999). Onset of adolescent eating disorders: Population based cohort study over 3 years. *British Medical Journal, 318*, 765-768.

R Core Team (2015). *R: A language and environment for statistical computing.* Vienna, Austria: R Foundation for Statistical Computing. http://www.R-project.org.

Rasberry, C. N., Chaney, B. H., Housman, J. M., Misra, R., & Miller, P. J. (2007). Determinants of nutrition label use among college students. *American Journal of Health Education, 38*, 76-82.

Striegel-Moore, R. H., & Bulik, C. M. (2007). Risk Factors for Eating Disorders. *American Psychologist, 62*, 181-198. doi:10.1037/0003-066X.62.3.181

Striegel-Moore, R. H., Dohm, F. A., Kraemer, H. C., Taylor, C. B., Daniels, S., Crawford, P. B., et al. (2003). Eating disorders in white and black women. *American Journal of Psychiatry, 160*, 1326-1331.

Wilfley, D. E., Schreiber, G. B., Pike, K. M., Striegel-Moore, R. H., Wright, D. J., & Rodin, J. (1996). Eating disturbances and body image: A comparison of a community sample of adult black and white women. *International Journal of Eating Disorders, 20*, 377-387.

Table 1

Predictor	Coefficient (SE)	95% CI Lower	95% CI Upper	P value	Odds ratio	95% CI Lower	95% CI Upper
Constant	-.57(.36)	-1.3	.11	.11	.57	.27	1.12
RISKSCORE	.12 (.04)	.05	.21	.002	1.13	1.05	1.23

R^2 = .106 (Cox-Snell). Model χ^2 = 12.43

Pitching Performance After Tommy John Surgery

Gwyn Foster and James Matthew Green, Ph.D.

University of North Alabama, Department of Health, Physical Education, and Recreation

Introduction

The ulnar collateral ligament (UCL) provides the main stress restraint to the elbow and tolerates well the stress associated with normal daily activity. However, for a baseball pitcher, the UCL may be stressed to intolerable levels, ultimately resulting in a tear to the UCL necessitating UCL reconstruction, known as Tommy John surgery.

The UCL

The UCL, located on the inside of the elbow, is a triangular ligament composed of three bands. The main restraint is the anterior band, which incurs the bulk of stress during pitching (Gillespie & Cowder, 2003). This stress is caused by the rotation of the humerus followed by rapid extension of the elbow while a pitcher goes through his entire range of motion (ROM). Repeated stress across time to the UCL may result in unnoticeable micro tears in the ligament. Eventually, cumulative damage may require surgery if not corrected with non-operative treatment (Patel et al., 2014).

UCL Reconstruction

Dr. Frank Jobe performed the first surgery in 1974 on Major League Baseball (MLB) pitcher, Tommy John (Gillespie & Cowder, 2003). Today, there are two modifications used along with Dr. Jobe's original surgery, which is known as the figure eight technique. In all three techniques, tunnels are drilled through the humerus and ulna and a tendon graft is passed through the tunnels to create a new UCL. In the figure eight technique, the graft is weaved in a figure eight pattern with any residual of the patient's UCL sutured onto the graft to add strength. In the docking technique, the tendon graft is passed through the ulnar tunnel and then brought together in the humeral tunnel and sutured together. In the Dane TJ technique, the tendon graft is passed through the humeral tunnel and screwed into the ulna allowing for less bone tunnels to be drilled. In this technique, the graft is made into a double strand graft by folding it over itself (Greiwe et al., 2009).

Literature Review

Erickson et al. (2013), found that 26% of National Collegiate Athletic Association (NCAA) athletes and 51% of grade school athletes think that pitchers should have Tommy John Surgery to enhance pitching performance regardless of medical need (Erickson et al 2013). Irrespective of ethical positions, research has not definitively determined if the surgery influences pitching performance (Erickson et al., 2013, Makhni et al., 2014). However, 70 to 90% of patients return to pre-surgery performance level (statistics such as earned run average, win percentage, strike out to walk ratio, and walks plus hits per innings pitched matched that of pre-surgery performance) (Makhni et al., 2014). Dugas et al. (2014), showed that

75% of patients who underwent the figure eight technique returned to pre-surgery performance level (as previously defined), 91% of patients who underwent the docking technique returned to pre-surgery performance level (as previously defined), and 87% who underwent the Dane TJ technique returned to pre-surgery performance level (as previously defined) (Dugas et al., 2014).

Erickson et al. (2013), observed initial improvement in the first two active years (participants had pitched one or more MLB games post-surgery) of post-operative pitchers. Data for three or more years post-surgery could not be compared because it did not exist for pitchers who had retired within five years of having the surgery. Retired pitchers accounted for 68% of pitchers in the study. Erickson et al. (2013), credits the improvement to the possibility of change in pitching status, for example a starting pitcher may have been reassigned to be a relief pitcher. This change in status would lead to fewer innings pitched and to facing fewer batters, which would make comparisons with pre-surgery performance difficult (Erickson et al., 2013).

Makhni, et al. (2014), found that 20% of pitchers did not return to MLB level competition. Thirteen percent returned only to active status (appeared in 1 to 9 MLB games) and 21% did not return to baseball at all. On average, pitchers showed decline in performance meaning that statistics, such as earned run average (ERA), walks plus hits per inning pitched (WHIP), strike out to walk ratio (K:BB), and win percentage, became worse.

The problems associated with these studies are that Erickson, et al. (2013), showed participants who needed only 18 months post-surgery to be eligible for participation and pitchers to have pitched in at least 1 MLB game to be considered rather than showing pitchers who had pitched in Minor League Baseball (MiLB), MLB, or both (Erickson et al., 2013). This could have been linked to improvement observed in the study.

Makhni et al. (2014), only considered pitchers who had been established in MLB (appeared in at least 1 game) before and after surgery rather than showing pitchers from both MiLB and MLB (Makhni et al., 2014). Because of sparse research and challenges associated with quantifying pitching performance, it is unclear if Tommy John surgery alters performance of baseball pitchers.

The Current Study

The purpose of this study was to determine if Tommy John surgery has any impact on pitching performance. We compared pre vs. post performance based on earned run average (ERA), walks plus hits per innings pitched (WHIP), and strike out to walk ratio (K:BB).

Materials and Methods

Using a secondary data source (described below), this study examined 59 pitchers who had surgery between 2001 and 2011. To be included in the study, a pitcher had to have played at least three years prior to and three years post-surgery in MiLB, MLB, or both. The total number of pitchers who fit the criteria was 43. Pitchers who had retired before they had reached three seasons post-surgery were considered significant to the study, but their statistics were not included in the data

analysis. Retirement quickly after surgery can mean that a pitcher's performance had become so poor that he could not make a team. To show this, MLB career lengths were averaged for both retired and active players and compared with pitchers who retired in 2014 without having the surgery. Players who retired before they reached the average were deemed to have retired due to poor or no performance post-surgery. A list of players was found on MLB Reports (http://www.mlbreports.com/tj-surgery/), cross-referenced with MLB Online (http://www.mlb.mlb.com) and Baseball Reference (http://www.baseball-reference.com). Players were then narrowed according to the inclusion criteria previously described.

Statistics were found on FanGraphs (http://www.fangraphs.com). Once obtained, the individual statistics (per pitcher) were entered into a spreadsheet where statistical analyses were conducted to compare mean values (pre vs. post-TJS). Measures used as dependent variables and determined to reflect performance in the current study were earned run average (ERA), walks plus hits per innings pitched (WHIP), and strike out to walk ratio (K:BB). These statistics were chosen because they are principally linked with the pitcher and not the abilities of the fielders or the offensive capacity of the team. Further, because they are expressed in relative terms, they are plausible reflections even in cases where a starting pitcher was reassigned to relief duties.

Statistical Analysis

The statistics were totaled for every season before surgery and for every season after surgery then averaged according to the number of seasons for each pitcher. Paired t-tests were conducted for each dependent variable. Results were considered significant at $p<0.05$ to show improvement or decline in performance.

Results

Dependent measures were expressed as means and standard deviations pre and post-surgery. There were no significant differences for any dependent measure pre vs. post-surgery (Table 1).

Discussion

Tommy John surgery is a popular surgery for correction of overuse injuries occurring to the UCL. Because of its proposed benefit to pitching performance, some have argued that it would be useful to undergo surgery without diagnosed medical need (Erickson et al., 2013). To date, research is sparse and it is still unclear whether Tommy John surgery is beneficial. This study investigated pre vs. post-surgery performance using ERA, WHIP, and K:BB as dependent measures reflecting performance.

Results of this study show that overall there was no difference in pitching performance before vs. after undergoing Tommy John surgery. However, basing conclusions solely on aggregate analysis may result in misleading conclusions. If a portion of participants benefited while a similar portion experienced worse performance, these may cancel each other and result in similar mean values pre vs. post-surgery. In that paradigm, concluding 'no significant effect' would be inaccurate for both groups of respondents. Consequently, we opted to analyze further and assess individual

responses using criteria representing what we determined a “meaningful” difference. We propose assessment in this manner provides a more clear view of true response to Tommy John surgery vs. basing conclusions solely on aggregate analysis.

Earned Run Average

Based on a change of ± 0.5 in ERA, 44% of pitchers showed a worse ERA where only 26% showed improvement. The other 30% showed no significant change. Fifty-five percent of the pitchers who showed improvement were starters. This percentage is meaningful considering that only 37% of the pitchers included in analysis were starters. This means that, though only one-third of the pitchers were starters, over half of the pitchers who improved were starters, so a starting pitcher may have a reasonable chance at improvement. Two-thirds of the pitchers were relief pitchers but less than half of those who improved were relief pitchers indicating that relief pitchers are less likely to improve. Thirty-eight percent of starters showed improvement in ERA, 25% showed decline, and 37% showed no significant change. Fifty-six percent of relief pitchers showed decline in ERA, 33% showed improvement, and 11% showed no change.

Fifty-five percent of the pitchers who showed improvement had an increase in innings pitched. Of the pitchers who showed a meaningful difference in ERA, 75% who had an increase in innings pitched showed improvement where 77% of pitchers who had a decrease in innings pitched showed decrease in performance. This could be because fewer innings pitched means fewer batters faced, so runs would have bigger impact on ERA than with pitchers who pitched more innings and faced more batters.

Other Data

Based on a change of ± 0.5, there was not enough change in K:BB or WHIP to be meaningfully different. Only 2 of the 43 pitchers showed an improvement in K:BB and only 1 pitcher showed a decline in K:BB. Only 1 pitcher showed an improvement in WHIP and only 2 pitchers showed decline in WHIP.

Career Lengths

Twenty-seven percent of pitchers retired before they were able to reach three seasons of play post-surgery (Table 2). This was considered a decline in performance because it was assumed that something resulted in the pitcher not being able to reach a performance level that would allow him to make a team or accrue playing time. Fifty-three percent of players included in the analysis retired with a 13-season MLB career on average. This is comparable to MLB pitchers who did not have the surgery and retired in 2014 with an average MLB career length of 11 seasons.

Sixty-six percent of the pitchers, including those not in the analysis, have retired and have an average MLB career length of 12 seasons pre and post-surgery combined. Thirty-six percent of pitchers retired before they reached a 10-season MLB career. These pitchers could have had a gradual decline in performance after surgery that caused a continual decrease in playing time until they had little to no playing time because of low performance, which would cause them to retire early because they were not playing. This suggests that there is approximately a

one in three chance that a pitcher may have his career cut short after having surgery. It is noted however that differentiating between direct impacts of surgery vs. natural decline in performance due to aging in that paradigm is difficult.

Further Assessment

Assessing pitching performance is excessively difficult due to extraneous variables, which are essentially impossible to control. Quantitative variables could be used such as fastball velocity, but these type variables would be problematic as well. For example, increased speed on a fastball would not necessarily translate into better performance. Win/loss record is confounded by the potential lack of offensive support a pitcher might receive. A one hit game in which the single hit was a homerun is viewed as exceptional yet could still result in a loss if the pitcher's team fails to score. An array of other factors makes such an assessment difficult. The age of the pitcher at the time of surgery, the severity of the injury, and adherence to and effectiveness of rehabilitation are but a few of the considerations that make for a difficult assessment. Although challenging, the question of the effectiveness of Tommy John surgery is worthy of future inquiry, particularly considering the popularity of the technique. Future studies should seek to control for as many extraneous variables as possible in the interest of extending the knowledge of this type of surgery on performance.

Conclusion

From this study, the impact of Tommy John surgery on performance cannot be definitively determined. Aggregate analysis failed to demonstrate a consistent overwhelming improvement. Assessment using criterion-based changes seems to suggest a great deal of variation among individuals in response to the surgery. Although improvement is difficult to quantify, pitchers can be expected to return to MLB without any significant change in performance level after having Tommy John surgery, based on current dependent measures (ERA, WHIP, K:BB).

Although a normal career length may be anticipated, it should be noted that 36% of pitchers in the current study retired before they were able to reach a career length of 10 seasons in MLB compared to the overall average of 12 seasons.

Over half of the relief pitchers in this study did show decline in ERA. Current analysis seems to suggest ERA is a more sensitive measure of performance (vs. WHIP and K:BB). Pitchers who have an increase in amount of innings pitched after surgery and starters are more likely to experience an improvement in ERA, yet the inter-individual variability makes broad-based conclusions essentially impossible. Additional work is needed to more clearly ascertain the impact of Tommy John surgery on pitching performance.

References

Dugas, Jeffrey, Justin Chronister, E. Lyle Cain, Jr., and James Andrews (2014). Ulnar Collateral Ligament in the Overhead Athlete: A Current Review. *Sports Medicine and Arthroscopy Review 22.3*, 169-181.

Erickson, Brandon J., Anil K. Gupta, Joshua D. Harris, Charles Bush-Joseph, Bernard R. Bach, Geoffrey D. Abrams, Angielyn M. San Juan, Brian J. Cole, and Anthony A. Romeo (2013). Rate of Return to Pitching and Performance After Tommy John Surgery in Major League Baseball Pitchers. *The American Journal of Sports Medicine 42.3,* 536-543.

Gillespie, Catherine, and Jamie Cowder (2003). Tommy John Surgery: A Revolutionary Procedure. *Nurse Practitioner Perspective 11.8,* 39-40.

Greiwe, R. Michael, Benjamin Bjerke-Kroll, and Christopher S. Ahmad (2009). Medial Collateral Ligament Reconstruction. *Operative Techniques in Orthopaedics 19.4,* 243-250.

Makhni, Eric C., Randall W. Lee, Zachary S. Morrow, Anthony P. Gualtieri, Prakash Gorroochurn, and Christopher S. Ahmad (2014). Performance, Return to Competition, and Reinjury After Tommy John Surgery in Major League Baseball Pitchers: A Review of 147 Cases. *The American Journal of Sports Medicine 42.6,* 1323-1332.

Patel, Ronak M., T. Sean Lynch, Nirav H. Amin, Gary Calabrese, Stephen M. Gryzlo, Mark S. Schickendantz (2014). The Thrower's Elbow. *Orthopedic Clinics of North America 45.3*, 355-362.

Table 1. Pre- vs. post-surgery comparisons for dependent measures (n= 43)

		Pitching Statistics			
		ERA	**Win %**	**K:BB**	**WHIP**
Pre-surgery	Mean	4.24	52.0%	2.50	1.37
	SD	1.17	9.3	0.98	0.19
Post-surgery	Mean	4.54	49.3%	2.50	1.42
	SD	1.56	12.6	0.78	0.23
P Value		0.29	0.24	0.98	0.26

SD = standard deviation

Table 2. Statistics regarding pitching career duration.

Pitching Career			
Pitcher Status	**Average Career (seasons)**	**Career Range (seasons)**	**No. of Pitchers**
Active	11	5-17	20
Retired Included in Analysis	13	5-22	23
Retired Not Included in Analysis	10	1-27	16
Included in Analysis	12	5-22	43

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Round Hill School: An Experiment in American Education

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Introduction

From 1823 to 1834, Round Hill School existed near Northampton, Massachusetts. Overlooked by most educational historians the experiments at Round Hill was regarded most often simply as the location where German gymnastics were first introduced into an American school and this fact quiet often seems only of importance to physical educators.

But Round Hill School was much more and deserves recognition as an important attempt to bring innovative ideas into the American education scene. The two founders of the school, Joseph Cogswell and George Bancroft, were among the first Harvard scholars to study in Germany at a time when the educational system of that country and much of Europe was undergoing massive changes in theory, curriculum, and methodology. These two young men carried the light of progressive European educational ideas back to America and after a futile attempt to kindle the flame of reform at Harvard College, set out to establish their own school which would incorporate the best of what Europe had to offer.

The purpose of this paper is to provide information which will lead to a better understanding of the Round Hill School experiment. Emphasis will be given to the conditions leading up to its establishment, the major characters involved in its establishment, the growth and curriculum of the school through its brief history and the introduction of German gymnastics and outdoor education at Round Hill.

Round Hill School: 1823-1834

The early 1800's were a time of change and transition in America. The original thirteen colonies on the eastern coast of the North American continent had waged a war for independence and emerged as the United States. The population of this young nation was growing, industry was becoming more common place and expansion was accepted. Materials and products were becoming more readily available to the increasing population. The young nation was sound and on its way to greatness.

Education, as a reflection of national transition, was ripe for innovation. The Latin school and the "grammar" school, the two most popular types of precollege schools in the eighteenth century, were rapidly being replaced by the academy in the early nineteenth century. The spread of publicly supported high schools, the first of which was established in 1821, was not yet a major factor in American secondary education. As a result, new schools such as the academy, were springing up throughout New England, many due to the current enthusiasm over experimental Pestalozzian theories of education (Nye, 1964). Harvard College, being the oldest and most prestigious institution of higher education in America, was becoming stale and suffered from academic inbreeding. President John Kirkland realized a need

for reform and innovation with the curriculum and pedagogical theory at Harvard as early as 1815. Hiring its own and perpetuating a program of educational ideas not geared to an emerging nation and the nineteenth century, Harvard, the pinnacle of American higher education, was compelled to look toward Europe for educational ideology which would provide the means for instituting positive change.

By the 1800's German universities were in the first bloom of their renaissance, leading the western world in almost every branch of learning (Morison, 1937). In 1815 President Kirkland became one of the primary instigators of an idea to send American scholars abroad to Germany for advanced study. Edward Everett and George Ticknor, graduates of and professors at Harvard College were the first such scholars to begin their advanced studies in Germany at the University of Gottingen. They were followed in 1816 by Joseph Green Cogswell and in 1818 by George Bancroft; also Harvard graduates (Hyde, 1970). "This was to begin a revolution which swept through American higher education during the nineteenth century and produced as an off-shoot the Round Hill School" (Bennett, 1965).

The time was right for Round Hill School. The academy was the dominate factor in American secondary education. The educational theories of Pestalozzi, which had swept Europe, were now beginning to make a stir in the arena of American education. There was a need for new schools to educate an expanding population. Round Hill School's only problem would be that it would be too effective in fulfilling its goals.

The Founders of Round Hill School

In 1823 two graduates of and former teachers at Harvard College, one a professor, the other a tutor, embarked upon an educational adventure which would establish an American school patterned after the German *Gymnasium* and Swiss experimental schools modeled on Pestalozzian principles. Their names were Joseph Green Cogswell and George Bancroft.

These two educators had similar experiences which helped to bring them together in this venture. Both were graduated of Phillips Academy at Exeter (Hyde, 1970). Cogswell and Bancroft were also graduates of Harvard College and were among the first American scholars sent to the University of Gottingen in Germany for advanced studies by Harvard College. Each returned to the United States and Harvard College very much impressed with the German *Gymnasium* and Pestalozzian principles of education especially as reflected in the Fellenberg system at Hofwyl, only to find discontent with their positions at Harvard primarily because of its resistance to innovation of German educational ideas. Both men felt strongly enough about the value of the educational experiences they had seen and studied in Europe to forsake Harvard and begin their own school, Round Hill School, which incorporated the best of the German *Gymnasium* and the systems of Pestalozzi and Fellenberg into an intellectual American setting (Nye, 1964).

Joseph Green Cogswell

Joseph Green Cogswell was born in Ipswich, Massachusetts on September 27, 1786. At sixteen he entered Harvard College, after spending a year and a half at Phillips Academy at Exeter, New Hampshire. While a student at Harvard from 1802 to 1806, he earned a livelihood during vacation by teaching school. In 1812 he was admitted to the bar and

married Mary Gilman, the daughter of the Governor of New Hampshire (Hyde, 1970).

When his wife died of tuberculosis in 1813 he gave up his law practice and moved to Harvard to accept a position of Latin tutor. While at Harvard he met and became acquainted with a young student by the name of George Bancroft. Cogswell remained at Harvard for two years until it was apparent that he was not satisfied with the narrow limits he felt it offered. This lack of fulfillment combined with poor health forced him to resign in 1815 (Hyde, 1970).

In 1816 Cogswell was employed by Mr. Israel Thorndike to accompany his son, Augustus Thorndike, a recent graduate of Harvard, to Europe and to remain with him for at least two years. When he arrived in Gottingen on November 1, 1816, he had no firm plan to engage in studies, but was looking forward to meeting with two friends, George Ticknor and Edward Everett (Hyde, 1970), the first two Harvard scholars to attend the University of Gottingen for the purpose of studies.

Within a short period of time after his arrival in Gottingen, Cogswell became interested in learning, in particular the German language, and became intently involved in scientific pursuits, namely geology, natural history and botany (Hyde, 1970). Other areas of study which occupied his time while in Germany included history, the arts, mineralogy, library science, and education (Bennett, 1965). In May his studies intensified as he spent nine hours per day listening to lectures, seven hours in private study, and an hour per day with his charge, Augustus Thorndike. By mid-June the long hours of study had begun to show on his physical health and he was advised to spend some time away from Gottingen. On September 6, 1817 Cogswell and young Thorndike departed for Italy. In Rome, Cogswell met Ticknor and spent some time with him before turning north to Switzerland (Hyde, 1970).

In the summer of 1818 Cogswell visited two famous schools in Switzerland, one established by Johann Pestalozzi at Yverdun and the other established by Phillipp von Fellenberg, a student of Pestalozzi, at Hofwyl. A second visit was made to Hofwyl in August and to Yverdun on October 23 (Hyde, 1970). Of the two experimental schools, Cogswell was most impressed with Fellenberg's system at Hofwyl.

Hofwyl had achieved fame for its manual labor plan which was intended to adapt each student's education to his social position and need. It was a "practical institute" for the sons of laborers and peasants and a classical curriculum for the sons of upper-class families who intended to enter business or the university. Regardless of social status, all boys at Hofwyl worked together on various tasks (Nye, 1964). Cogswell was also impressed with the absence of rewards and punishment at Hofwyl (Bennett, 1965).

Cogswell was critical of Pestalozzi and his school at Yverdun. During his two visits to Yverdun, Cogswell noted the lack of discipline among the students and could not agree with Pestalozzi's method of scholarship which excluded memorization. An obvious jealousy for the work done by Fellenberg was also noted on the part of the school at Yverdun (Hyde, 1970).

In spring 1819 Cogswell and Thorndike returned to Germany. In that year he received a Doctor of Philosophy (PhD) degree and while visiting some of his former Gottingen professors met again a former student of his, George Bancroft. Leaving Germany, Cogswell once more visited Pestalozzi, his

second visit, before traveling to France to spend the winter. In 1820 he traveled to England and Scotland. While in Scotland he contributed an article, "The Means of Education, and the State of Learning in the United States of America," to *Blackwood's Magazine* (Hyde, 1970). In this article Cogswell was highly critical of the American education system which he described as "a lamentable waste of time" taught by "bad masters, under a bad method of study" (Nye, 1964).

In late October of 1820 Cogswell returned to America and in January of 1821 he accepted the position of professor of mineralogy and chemistry, a position especially created for him, and librarian, previously held by Andrews Norton, at Harvard. Fresh from Europe and full of innovative educational ideas, Cogswell was anxious to implement change. His reforms began with the library but the Harvard Corporation showed little interest. Harvard could not immediately accept the new ideas from Europe and Cogswell became impatient (Hyde, 1970).

George Bancroft

George Bancroft was born in Worcester, Massachusetts on October 3, 1800 and, like Cogswell, was educated at Phillips Academy at Exeter. From Exeter he moved on to Harvard where he was tutored by Cogswell and later graduated in 1817. Meanwhile Edward Everett had corresponded with President Kirkland of Harvard recommending that the Harvard Corporation sponsor another American scholar to study at the University of Gottingen. The Corporation considered the request and decided to send Bancroft for three years (Hyde, 1970).

Bancroft arrived in Germany on August 18, 1818 and embarked upon his studies which consisted principally of Greek, Hebrew and Latin. While at Gottingen he became increasingly critical of German manners and customs. In early September he successfully defended nine theses and at the age of twenty was awarded a Doctor of Philosophy (PhD) degree (Hyde, 1970).

After leaving Gottingen, Bancroft traveled to the University of Berlin where he attended philosophical studies and lectures on the science of education. From inspiration received at Berlin he began to study the public and private schools of Berlin, became enthusiastic about the schools he visited, and began to give thought to American educational practices (Hyde, 1970).

About this time the idea of establishing an American school based on the German model first appears in relation to Bancroft. He, unlike Cogswell, first entertained the idea while in Germany but the literature is not clear on exactly whose idea such a school was. Nye (1964) suggests that in early 1819 Bancroft suggested such a project to President Kirkland of Harvard and asked for the older man's advice. Kirkland in return advised against it (Nye, 1964). Hyde (1970) in his thesis on Round Hill School suggests that the initial suggestion for a school probably came from President Kirkland. As early as January 1819 Bancroft had written to President Kirkland indicating the plans he was following clearly prepared
him to become an instructor at Harvard, a clergyman, or that he would set up a high school. In a letter on July 6, 1819, Bancroft, still in Germany, indicates that the idea of President Kirkland concerning the establishment of a high school appears to be a fine field for him (Bancroft)

to apply his knowledge (Hyde, 1970). Hyde's position is also supported by Bennett in an earlier article. Bennett also states that the original suggestion for the establishing of a high school was made by President Kirkland and that Bancroft responded favorably to the suggestion. Bennett further states that Bancroft made it clear that he did not want to devote more than five years of his time to such an occupation and suggests that Bancroft no doubt felt an obligation to Kirkland who had financed his study abroad and that this feeling of obligation precipitated his positive response to the suggestion (Bennett, 1965).

Bennett (1965) also suggests an interesting possibility for both Bancroft's and Cogswell's stay in Germany. It is apparent that these two scholars developed similar ideas about education while in Europe and each traveled widely. Bennett suggests the possibility that one or both many have visited the Schnepfenthal Institute where Johann GutsMuths was teaching. The institute was located at Gotha which was about seventy-five miles from Gottingen. Cogswell mentions visiting Gotha but does not mention the institute or GutsMuths.

In February, 1821 Bancroft left Berlin and traveled to Weimar where he visited Goethe. From there he proceeded to Heidelberg where he attended a series of lectures by Schlosser. By early May he had arrived in Paris where he became associated with several notable men including the Marquis de Lafayette. From France his travels continued to London, back to the continent and Switzerland, south to Rome and Naples before departing for American in June, 1822 (Hyde, 1970).

After his return to the United States, Bancroft accepted an appointment as tutor of Greek at Harvard. His stay at Harvard however was not a pleasant one for the Cambridge society was somewhat hostile to his adopted European ways and the students ridiculed his behavior. In addition, he met with the same resistance that Cogswell had experienced when attempting to inject innovative European ideas on education into the established, inflexible Harvard system. In the autumn of 1822 Bancroft and Cogswell began to seriously consider the establishment of a school for boys to be patterned in a manner similar to the best European schools (Hyde, 1970).

Round Hill School

As the result of mutually unsatisfying tenures at Harvard, Bancroft, and Cogswell became committed to the establishment of a secondary school based on the European idea of education in the fall of 1822. They first considered locating the school near Baltimore but were advised against that location. With their duties at Harvard completed in June of 1823 they set out to find a suitable site for their proposed school. Near Northampton they found two stone houses located on a small rolling hill locally know as Round Hill. The two houses and about fifty acres of land were available for rent and provided a private and beautiful location for their school (Nye, 1964).

The first task after identifying the site for the school would be the recruitment of students. To accomplish this, a printed prospectus was published in Cambridge in the summer of 1823 listing the conditions and objectives of the school:

> The institute which we propose to establish is designed to furnish occupation for those years, which in

> France are spent at a *College* and in Germany at a *Gymnasium*. A boy who has completed his ninth year, is old enough to commence his regular studies, and to delay them longer would be to waste precious time, and (what is of still more moment) the period when good habits are easily formed (Nye, 1964).

The prospectus went on to state:

> We would also encourage activity of body, as the means of promoting firmness of constitution and vigor of mind, and shall appropriate regularly a portion of each day to healthful sports and gymnastic exercises (Bennett, 1965).

Male boarding students between the ages of nine and twelve were preferred and students from other schools were not welcome since the methods at Round Hill were to be revolutionary to those used in other schools. Between ten and twenty students were to be selected at a cost of three hundred dollars for the year, which included two vacations of three weeks each, one in the summer and one in the winter. The methods of government within the school were to be "parental" type with no corporal punishment. Loss of meals or confinement to room was the usual penalty for rules infractions with confinement to the "dungeons", a dark basement room, the most stringent punishment known at Round Hill. Industry and obedience would be encouraged as well as religion in a broadly tolerant and unobtrusive way. A good library was promised and all boys were expected to be prepared to learn Latin. Spending money was not to be provided less the economic equality of the student body was destroyed (Nye, 1964).

On October 1, 1823 Round Hill School opened with fifteen boarding students and ten day students. Cogswell lived in one house and Bancroft in the other along, with Bancroft's sister, N.M. Hentz, who served as the school hostess and a teacher of French, the boarding students, and four servants. The curriculum consisted of English, Greek and Latin, French, Spanish, German, and Italian (Gerber, 1971), history, geography, and mathematics. With the opening of the school, Bancroft became responsible for curriculum and methodology and Cogswell for administration.

The daily schedule began at six in the morning with the boys rising and preparing for devotional exercises at six-thirty. At six-forty-five they were in their room studying and reciting at which time they moved outside for calisthenics, followed by a mile run in which Bancroft always took part. The run was followed by breakfast at eight and at eight-thirty the students moved to the playing field for a half-hour of archery, balancing, tumbling, and games. Classes met from nine to twelve followed by dinner. At one in the afternoon another half-hour of exercise was provided followed by classes from two until five. Sports took place for half an hour from five to five-thirty. The evening meal lasted from five-thirty to six. From six-thirty until eight French exercises were written and at eight-thirty, following a short devotional meeting, the students retired to bed (Nye, 1964). Gerber (1971) states that the day began at six and ended at nine with the two hours between five and seven p.m. set aside for exercise and recreation. Bennett states that three

periods for play were provided, after each of the three meals, ranging from half an hour to over an hour. He further states that probably no gymnastics were taught the first year but that the boys participated in a great deal of exercises, running, leaping, and climbing (Bennett, 1965).

Enrollment at Round Hill School began in increase and by 1825 the enrollment had grown to sixty-nine boys. Between the summer and autumn of 1826 the enrollment increased from eighty to one hundred and thirty-five boys. After that time the enrollment was held to one hundred (Hyde, 1970). With the increasing enrollment the curriculum was also expanded. Elocution, bookkeeping, horticulture, statistics, surveying, drawing, music, dancing, art, history, moral philosophy, "Roman Antiquities," geometry, trigonometry, Blair's *Rhetoric*, reading of classics, mercantile arithmetic, (Nye, 1964) chemistry, and Christian theology were courses offered as part of the expanded curriculum (Hyde, 1970). The rapid increase brought a sense of security to Bancroft and Cogswell and with the opening of the 1824 term they felt sufficiently secure to negotiate for the purchase of the school buildings and grounds. They succeeded in purchasing the propriety for $12,000, $8,000 of which was a loan from the Harvard Corporation, made as an indication of its faith in the school (Nye, 1964).

As the reputation of the school spread, students came from twelve states and four foreign counties to attend the school established by Bancroft and Cogswell. Round Hill was also visited by distinguished guest from all over the world, including Lafayette (Nye, 1964).

Even as Round Hill School was in its prime, interest in the venture began to subside on the part of Bancroft. As early as 1827 it was becoming obvious that he was growing tired of school mastering and that he longed for more scholarly undertakings. In March of 1827 Bancroft married Sarah Dwight and for a time things seemed brighter at Round Hill. This period of renewed interest was short lived for "the critter", as he was called by the students, still had problems in the classroom. He became so involved in his own scholarly endeavors that teaching became a burden.

During 1828 the relationship between Bancroft and Cogswell became strained. By now Bancroft was tired of the routine life of the schoolmaster and on March 3, 1830 Cogswell officially wrote Bancroft and proposed that he be discharged of his legal obligations and paid five thousand dollars (Hyde, 1970). The final terms of the agreement states that Bancroft would remain for one year at a salary of $1,600 and receive a note from Cogswell for his share of the assessed value of the school less outstanding debts. Ten years later Bancroft recorded on the face of the note, "This debt was never paid and its payment will never be asked" (Nye, 1964).

After Bancroft's departure in 1831 Cogswell continued to operate the school, which he now leased from the Round Hill Corporation, a company chartered in 1829 at the time of conflict between the two founders, but financial problems soon made it evident that the venture was limited. This financial stress came from two directions. First, the cost of operating the school could not be matched by the three hundred dollars tuition, which was even higher than tuition at Harvard. Second, the school was too successful. As a result of this success, students who attended Round Hill School were so well prepared that they could enter any institution of higher education such as Harvard at least at the sophomore level. But the policy of such institutions was to require payment of tuition for years prior to

admissions. The result was double payment for a student's education and the thrifty New England families saw no reason for such payment (Hyde, 1970).

Cogswell announced his intention to give up the school in July of 1832. For a time, it appeared that financial backing could be obtained but in the end the effort to secure such support failed. At the conclusion of winter term in April 1834 Round Hill School closed (Hyde, 1970) and Cogswell moved to a position as head of a school for boys near Raleigh, North Carolina (Leonard, 1947).

Physical Education at Round Hill School

From the beginning the philosophy and practice of Cogswell and Bancroft at Round Hill School reflected a harmonious union of body and mind in education. Early information on the proposed purpose and content of the program suggests an emphasis on physical activity in the form of exercise and gymnastics. When the school opened certain times of the day were set aside for participation in such activities and Cogswell and Bancroft lead the students in exercise, running, jumping, leaping, and climbing. Bancroft built a half-mile running track which was used by the boys as well as mile runs through the woods (Nye, 1964).

In February of 1825 Charles Beck, a recent immigrant from Germany, joined the faculty of Round Hill School as instructor of Latin and gymnastics. The appointment of Beck marked three firsts in the history of American physical education: 1. Round Hill School was the first school to have a teacher of physical education; 2. First school to have physical education as part of the curriculum; and 3. The first introduction of German gymnastics in America education (Bennett, 1965).

Charles Beck was born in Heidelberg on August 19, 1798. After his father died, his mother married Wilhelm De Wette. The family moved to Berlin in 1810 where Beck met Friedrick Jahn and began attending the Hasenheide *Tumplatz,* recently opened by Jahn. Beck developed more than the usual proficiency in all the arts of the *Turner* and became active in their political movement. Following the assassination of Kotzebue by Sand in 1819, Beck's mother and step-father left Berlin for Basel, Switzerland (Leonard, 1947).

Beck remained in Berlin for a while and in 1822 was ordained as a Lutheran minister at Heidelberg, later receiving his doctor's degree in theology at the University of Tubingen in 1823. Because of fear of political arrest, he left for Basel to join his family and there met Charles Follen another political refugee. Because of the insecurity of their position in Basel the two left, separately, for Paris in October of 1824. In Paris they met with Lafayette, whom Follen had spent time with on a previous visit, and were urged to go to America. Provided with letters of introduction from Lafayette (Rice, 1958) the two left for America on November 5 and arrived in New York on December 19, 1824 (Leonard, 1947).

Three days after arriving in New York, Follen sent a letter to Lafayette, who was now visiting America, requesting advice. Lafayette suggested that the two travel to Philadelphia, which they did, arriving there on January 12, 1825. Meanwhile in Washington D.C., Lafayette was visited by George Ticknor whom he sought to interest in the two German refugees. After leaving Washington, Ticknor traveled to Philadelphia to look up the two and subsequently sent a letter to his friend Bancroft at Round Hill School recommending Charles Beck get a position. Bancroft was already in receipt of

a letter from DeWette recommending his stepson when he received Ticknor's letter. The letter from Ticknor secured Beck the appointment of instructor of Latin and gymnastics at Round Hill School (Leonard, 1947).

Leonard, as previously noted, credits Ticknor with securing Beck's position at Round Hill School. Another possibility is that Lafayette may have also been instrumental in this process. Bancroft had met Lafayette while visiting in Paris, as a Harvard scholar, Lafayette had later visited Round Hill School, and Beck had a letter of introduction from Lafayette. Lafayette may possibly have been a link between Bancroft and Beck.

In February 1825 Beck left for Northampton, Massachusetts. When he arrived at Round Hill School be began to plan for the Round Hill "gymnasium" which was to be a miniature Hasenheide *Tumplatz*. Ample room for the *turnplatz* was to be found on the northwest side of Round Hill in an area of from eight to ten acres, bordered on the west side by a brook. In this area vaulting horses, horizontal balancing beams, mast, bars, ladders, and other pieces of apparatus of the type found in the German *turnplatz* were placed. Plates from Beck's translation of Jahn's “Treatise on Gymnastics” indicate activities such as high jumping, wrestling, pole vaulting, broad jumping, and exercises with ropes as part of the program (Gerber, 1971). The whole school was divided into classes and each class received an hour of instruction, three times a week from Beck. In addition to the German system of gymnastics, the boys also participated in a variety of other activities. Swimming, ice skating, sledding, wrestling, boxing, hockey, football, possibly baseball, archery, marbles, horseback riding, "pitching the bar", and dance were also part of the program of physical activities at Round Hill School (Bennett, 1965).

In response to numerous requests Beck translated Jahn's *Deutsche Turnkunst* of 1816 and turned it over for publication in January of 1823. The translation appeared as “Treatise on Gymnastics” and mentioned Round Hill School as the first school to introduce gymnastic exercise. The book also indicates that the gymnastics at Round Hill were of the informal type advocated by Jahn rather that the formal gymnastics later arranged by Spiess (Bennett, 1965).

Beck's tenure at Round Hill ended in 1830 when he left to take part in the establishing of a school for boys at Phillipstown, New York. Two years later he was elected to the position of professor of Latin at Harvard (Leonard, 1947).

Outdoor Education at Round Hill School

Another aspect of the educational program at Round Hill School which until recently had been overlooked was the development of the area of outdoor education. The introduction of this experience into the arena of American education is usually credited to Frederick Gunn, founder of the Gunnery School in Connecticut. However, research done by Bennett indicated that this distinction properly belongs to Cogswell and Round Hill School (Bennett, 1972).

The founders of the school, Cogswell and Bancroft, were ardent hikers while in Europe. Cogswell, having an interest in botany and mineralogy, did a great deal of walking in search of specimens.

Once Round Hill School was open in 1823 the founders wasted no time putting their ideas into practice and that

included hiking, camping, and outdoor experiences as a means of enhancing education and promoting physical vigor. Cogswell would lead the boys on long hikes to interesting places and to meet famous people. On some of the longer journeys wagons would be provided to carry supplies and part of the group. Nights would be spent camping out after enjoying a meal secured in a neighboring village. Cogswell on occasion gave lectures along the way on geology.

An interesting part of the school environment was “Crony Village” which was a series of small huts dug into the side of the hill and having low chimneys and front doors with a lock and key. The building materials were brick, wood, and dirt and these huts built by the boys in groups of two or three, provided many happy hours. Food was an important concern for the boys and they trapped, hunted with bows and arrows they had made, and cooked animals they could secure such as rabbits, squirrels, birds, and woodchucks. In addition to this meat they also had vegetables from their gardens, the tending of which was a part of their program.

Crony Village came to a sudden and sad end however. One of the boys flirted with a neighboring farmer's daughter and a complaint was made. The boy was expelled and Cogswell ordered Crony Village be demolished.

Other activities of an outdoor nature included skating and coasting in the winter, swimming in the summer, horseback riding as well as cultivating gardens and cutting firewood in winter. Bennett concludes that the school camping and outdoor education experience at Round Hill School is well documented.

Summary

The failure of Round Hill School was economic rather than academic. From the educational prospective the experiment was a great success. Boys who participated in the Round Hill program were provided with a learning experience which placed them ahead of their peers in terms of academic achievement. They were motivated by a program which refused to accept corporal punishment as a necessary part of learning. The Round Hill curriculum emphasized and provided for a harmonious balance between the development of the body and the mind as well as the spirit of the students. This fact is substantiated by the emphasis placed on a variety of learning experiences within the school curriculum, the hiring of a teacher of gymnastics and the promoting of such physical activities by the founders of the school, and the regular daily devotional services and organized Sunday religious service attended by students of the school.

The ideas of Round Hill School were carried past its closing date in 1834. Some twenty years later George Shattuck, a student at Round Hill, sought a school similar to his alma mater for his son. Unable to find one he founded St. Paul's School in Concord, New Hampshire based on the Round Hill idea. Other schools followed suit and to some degree ensured the perpetuation of the educational theories of Cogswell and Bancroft (Gerber, 1971).

The practice of gymnastics was introduced to American schools at Round Hill. Once the seed had been planted by the educational approach of Cogswell and Bancroft and brought to bloom by Beck and the introduction of German gymnastics, the practice grew and spread through schools far and wide. The idea eventually spread to the college and university level and

programs were offered at Yale, Amherst, Brown, Williams, and even Harvard. The system or the approach was not always the same but the validity of the body and the mind had been established and the program at Round Hill had provided the foundations.

Round Hill School succeeded in introducing the educational theories of Europe, namely those of Pestalozzi, Fellenberg, and the German *Gymnasium*, to American education. The introduction was completed in a manner which demonstrated potential and once the door was open there was no turning back, American education was required to move forward. For years American education had wandered along seeking relevance, dominated by the symbol of American scholarship, Harvard College. A move in the right direction came with the emphasis toward the academy as a replacement for the Latin school and the grammar school. But what was needed to really push American education forward into the nineteenth century was the revolution brought on by innovative ideas. The only source of such ideas, accepting the fact that America was moving rather slow in developing its own, was Europe and at the peak of European education was Germany. Cogswell and Bancroft became the activating factor, through Round Hill School, to bring about the earliest reforms in American education along the lines of the European system. The Round Hill experiment was a major contributing factor to the development of an American educational approach to meet the requirements of a young nation entering the nineteenth century.

There is no doubt that financial indebtedness lead to the decline and closure of Round Hill School. The indebtedness incurred during the final years of operation should not however be viewed as a reflection of academic failure. In fact, just the opposite was the case as indicated by the advanced academic standing awarded to Round Hill students entering such institutions of higher education as Harvard and Yale. The real problem was with Round Hill's break for the regular program prescribed for college preparation. The unfortunate result was students were prepared academically in advance of their peers. Placing such students in the established system which made no provision for innovation and academic achievement beyond the standard level, resulted in increased monetary expenditures on the part of the students' parents for the accepted level of college education. Parents were paying for their sons' education twice. Round Hill School was ahead of its time in providing a quality education for students. Its failure reflects the inability of an inflexible system to accept quality above the standard level.

References

Bennett, Bruce L. (1972) "Camping and Outdoor Education Began at Round Hill School," in George W. Donaldson and Oswald Goering (Eds.), *Perspectives on Outdoor Education ... Readings.* Dubuque: W. C. Brown Company Publishers.

Bennett, Bruce L. (1965) "The Making of Round Hill School". *Quest, vol. 4,* 53-64.

Gerber, Ellen W. (1971). *Innovators and Institutions in Physical Education*. Philadelphia: Lea and Febiger.

Hyde, William J. (1970). *The Round Hill School 1823 to 1834, An Early Experiment in American Physical Education.*

Unpublished Master's thesis, University of Massachusetts.

Leonard, Fred Eugene. (1947). *A Guide to the History of Physical Education.* Philadelphia: Lea and Febiger

Morison, Samuel Eliot.(1937). *Three Centuries of Harvard, 1636-1936.* Cambridge: Harvard University Press.

Nye, Russel B. (1964). *George Bancroft*. New York: Twayne Publishers, Inc.,

Rice, Emmett A., John L. Hutchinson, and Mabel Lee.(1958). *A Brief History on Physical Education*. New York: The Ronald Press Company.

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Should Youth Athletes Be Involved in Structured Sports Training Workouts?

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North Dakota State University, Department of Health, Nutrition and Exercise Sciences

Introduction

Many parents have a major misconception that working out; or more specifically, weight training, will stunt their child's growth and have dramatic negative effects to their bodies (Wallace & Wallace, 2007). When training youth athletes, gaining size may not always happen, especially if they are prepubescent athletes; however, they will be receiving a possible positive neurological effect (Wallace & Wallace, 2007). Their neurons will fire at a more efficient rate, which is very beneficial because training the neurological connection is most effective at a young age and harder to effect as the athletes become older.

Working out is not just using dumbbells and barbells. It also includes a variety of movement skills such as; speed mechanics, acceleration and deceleration mechanics, agility mechanics, jumping mechanics, and most importantly joint mobility exercises that are crucial to developing skills in any sport.

Working out and participating in exercise has a far greater impact then just in sports. It has been shown that schools that have a structured physical education program, one that involves exercise and not just learning the dimensions of a volleyball or tennis court, have generated tremendous impact on education in the classroom. More specifically, studies have shown that students who were below average in test scores achieved average or above scores and had more enjoyment in classes as a result of engagement in physical activity (Coe, Pivarnik, Womack, Reeves, & Malina, 2006; Fox, Barr-Anderson, Neumark-Sztainer, & Wall, 2010; Ratey & Hagerman, 2008).

The remainder of this article discusses the myths and common misconceptions of resistance training and the positive health factors of working out and exercise for youth athletes. Within this paper the term youth is defined as the period of life that includes both the prepubescent and adolescent years. In addition, resistance training is defined as a specialized form of conditioning that is used to increase one's ability to exert or resist force (Faigenbaum, Kraemer, et. al, 1996). The paper concludes with a commentary on the appropriate and safe manner to train and progress with youth athletes.

Myths of Resistance Training

There are many myths and non-credited statements that people make about youth athletes and resistance training, not only regarding children, but also about specific sports and positions within a sport. For example, swimmers often avoid resistance training due to the belief that resistance training will add mass, hypertrophy, and slow down one's swim time because of drag. Peltier, Strand, and Terbizan (2008) described other common resistance training myths which include:

- Training youth athletes will fuse their epithelial plates together resulting in fractures.

- Ligaments, tendons, and bones are not mature enough.
- Damage may be done psychologically.

None of these myths have any supporting scientific evidence but have simply been passed down from scared parents and uninformed coaches (Wallace & Wallace, 2007). Nor has it been found that resistance training is anymore harmful then any other sport. When training a youth athlete, “current research findings indicate a relatively low risk of injury in children and adolescents who follow age-appropriate resistance training guidelines, which include qualified supervision and instruction” (Faigenbaum, 2010, p.2). In fact, resistance training is a much less dangerous activity compared to some other popular sports. For example, the sport of soccer has an injury rate of 6.20 injures per 100 hours, football has a rate of 0.10 injuries per 100 hours, and resistance training has a rate of 0.0035 injuries per 100 hours (Hamill, 1994).

Positive Health Factors

Approximately 17% of children and adolescents from ages 2-19 are obese (Ogden, Carroll, Kit & Flegal, 2014). These figures have nearly tripled from 1980 (National Center for Health Statistics, 2012). With a growing number of obese children and adolescents these numbers will carry over into their adult lives. Unfortunately, children who are overweight and obese are more likely to become overweight and obese adults (Serdula, Ivery, Coates, Freedman, Williamson & Byers, 1993). With overweight and obesity on the rise, our health cost will increase because of the related health problems that correlate from unhealthy lifestyles. With unhealthy lifestyles come unwanted health issues, high blood pressure and high cholesterol, risk for cardiovascular diseases, type 2 diabetes, respiratory issues, joint programs, fatty liver disease, and social and psychological problems (Swallen, Reither, Haas, & Meier, 2005).

Resistance training can increase the fat-free mass and decrease body fat percentage helping to decrease the negative health factors that come along with overweight and obesity (Cullinen, & Caldwell, 1999; Kravitz, 1996). In essence, resistance training offers the benefits of weight loss and increasing energy expenditure. An increase in resistance training has shown an adaptation to the size of the heart and an increase in the left ventricular wall thickness (Kravitz, 1996). The increase in heart size due to resistance training allows for lower blood pressure, decreased resting heart rate, and lower total cholesterol (Kravitz, 1996). Resistance training has many more positive health benefits for youth athletes beyond just helping them improve their sport skills (Peltier, Strand & Christensen, 2008).

Safe Training

When planning a resistance training program there needs to be a long term plan relative to where athletes need to be in order to succeed in their sports. Doing a ‘work out of the day’, or W.O.D., is very common in a current training trend called “Crossfit”. However, this program does not involve long term planning and does not consist of a progressive training program.

Youth athletes must be coached through a timely training program where the athlete can focus on simplified exercises, master the exercises, and then move on to the next progression

until they master all the steps. An example of an athlete learning to back squat would progress in this order; first learn how to counter balance squat, then proceed with dumbbell or goblet squat, then front squat, and finally when all is mastered and performed correctly, a back squat. Table 1 provides guidelines and safety measures as suggested by Faigenbaum (2003).

Female Resistance Training

Resistance training for young female athletes is just as significant, if not more significant, than it is for young male athletes (Mannie, & Wakeham, 2000). Female athletes, as reported by Mannie and Wakeham (2000) naturally carry less overall muscle and possess shorter muscle bellies due to the fact that women tend to have lower muscle-to-body fat ratios than men, have only about one-tenth of the testosterone (muscle-building hormone) of men, and are smaller than men. When designing a resistance training program for female athletes the program must include knee-strengthening exercises as female athletes have a much higher occurrence of sustaining a knee injury then male athletes (Mannie, & Wakeham, 2000). Including exercises such as one leg squats and appropriate landing mechanics help work proprioception and prevent the knee from caving in resulting in knee injuries

Adequate Rest Intervals

While athletes are undergoing a training program, there must be an emphasis on proper and adequate rest and recovery. Without adequate rest between sets and exercises, the body will not be able to replenish the energy systems to allow an athlete who is training to continue to grow and develop (de Salles, Simão, Miranda, da Silva Novae, Lemos, & Willardson, 2009).

Athletes also need mental breaks in order to think about the exercise they just performed, especially if there are corrections to be made. Research has indicated that the rest interval between sets is an important variable that affects both acute responses and chronic adaptations to resistance exercise programs (de Salles, et al., 2009). If one's goal is to add hypertrophy (increase muscle size), the recommended rest intervals are 30-60 seconds, as opposed to training for a one reputation maximum when the rest period is 3-5 minutes (de Salles, et al., 2009)

Safe Training Environment

Providing a safe environment is the number one priority when developing a training program for an athlete (Borkowski, 2007) as anyone who performs resistance training, including adults and youth, has a chance of being injured (Peltier, Strand & Christensen, 2008). Instructors must ensure that there are spotters present and alert during any time when need. However, using a spotter on Olympic lifts is unnecessary and can actually put the spotter in a dangerous position. Borkowski (2007) commented, "Instructors should check to see if the user: sets him/herself for the exercise, starts in a controlled manner, stops for a moment at the top of his/her lift, returns the weight in a controlled manner, knows how to secure weights (free and machine), knows how to put weights on, take off, and store" (p.73). Athletes must understand that lifting heavy weight is not the most important thing, and sometimes using overly heavy weight can cause damage to an athletes'

growth (Borkowski, 2007). Athletes must be able to use appropriate weight that they can move through a full range of motion for the acceptable amount of sets and reps required (Borkowski, 2007).

Conclusion

All coaches using resistance training with youth athletes must hold themselves to a very high standard. Progressive resistance training is for athletes of all ages and when the right progression and adjustments are made, it is very safe. There are many positive health factors that result from youth resistance training that can lead to a positive involvement in physical activity in the future. Female athletes can benefit from resistance training and rigorous training programs as well as male athletes with a special emphasis on knee strengthening and landing mechanics.

References

Borkowski, R. P. (2007). A weight room safety checklist. *Coach & Athletic Director, 77(1),* 71-74.

Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J., & Malina, R. M. (2006). The effect of physical education and activity levels on academic achievement in children. *Medicine & Science in Sport and Exercise, 38,* 1515-1519.

Cullinen, K., & Caldwell, M. (1999). Weight training increases fat-free mass and strength in untrained young women. *Journal of the American Dietetic Association, 98,* 414-418.

De Salles, B. F., Simão, R., Miranda, F., Da Silva Novaes, J., Lemos, A., & Willardson, J. M. (2009). Rest Interval between sets in strength training. *Sports Medicine, 39,* 765-777.

Faigenbaum, A. (2003). Your resistance training. *President's Council on Physical Fitness and Sports Research Digest, 4*(3), 1-8.

Faigenbaum, A.D (2010). Resistance training among young athletes: safety, efficacy and injury prevention effects. *British Journal of Sports Medicine, 44*, 56-63.

Faigenbaum, A., Kraemer, W., Cahill, B., Chandler, J., Dziados, J., Elfink, L, et al. (1996). Youth resistance training: Position statement paper and literature review. *Journal of Strength and Conditioning Research, 18(1)*, 162-166.

Fox, C. K., Barr-Anderson, D., Neumark-Sztainer, D., & Wall, M. (2010). Physical activity and sport team participation: Associations with academic outcomes in middle school and high school students. *Journal of School Health, 80,* 31-37.

Hamill, B. (1994). Relative safety of weightlifting and weight training. *Journal of Strength and Conditioning Research, 8(1)*, 53-57

Kravitz, L. (1996). Resistance training: Adaptations and health implications. *IDEA Today, 14(9),* 38-46.

National Center for Health Statistics (2012). *Health, United States 2011: With special features on socioeconomic status and health.* Hyattsville, MD, U.S. Department of Health and Human Services.

Mannie, K., & Wakeham, T. (2000). Strength training for female

athletes. *Coach & Athletic Director, 70(5),* 6.

Ogden, C.L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *The Journal of the American Medical Association, 311*, 806-814.

Peltier, L., Strand, B., & Christensen, B. (2008). Youth resistance training: A review, *The Journal of Youth Sports, 4(1),* 18-23.

Peltier, L., Strand, B., & Terbizan, D. (2008). Resistance training in a physical education curriculum: Implementation and training guidelines. *Missouri Journal of Physical Education, Recreation and Dance, 18,* 70-78.

Ratey, J., & Hagerman, E. (2008). *SPARK: The revolutionary new science of exercise and the brain.* New York: Little, Brown and Company.

Serdula, M. K., Ivery, D., Coates, R. J, Freedman, D. S., Williamson D.F., & Byers, T. (1993). Do obese children become obese adults? A review of the literature. *Preventive Medicine, 22,* 167-177.

Swallen, K. C., Reither, E. N., Haas, S. A., & Meier, A. M. (2005). Overweight, obesity, and health-related quality of life among adolescents: The National Longitudinal Study of Adolescent Health. *Pediatrics, 115,* 340-347.

Wallace, K. L., & Wallace, B. J. (2007). Raising the bar: Pushing away the misconceptions and pulling out new ideas regarding youth strength training. *Physical & Health Education Journal, 73(4),* 16-22.

Table 1: Guidelines and Safety Measures

- Provide qualified instruction and supervision
- Ensure the exercise environment is safe and free of hazards
- Teach youth the benefits and risks associated with strength training
- Begin each session with a 5 to 10 minute warm-up period
- Start with one light set of 10 to 15 repetitions on a variety of exercises
- Include exercises to strengthen the lower back and abdominals
- Progress to 2 to 3 sets of 6 to 15 repetitions depending on needs and goals
- Increase the resistance gradually as strength improves
- Focus on the correct exercise technique instead of the amount of weight lifted
- Strength train two to three times per week on nonconsecutive days
- Listen carefully to each child's concerns and answer any questions
- When necessary, adult spotters should be nearby in the event of a failed repetition
- Focus on participation with lots of movement and positive reinforcement
- Keep the program fresh and challenging by systematically varying the training program

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-over-

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Name: _____

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Must be a non-HPERD professional and have made significant contributions to HPERD programs. Not open to ASAHPERD members.

Name: _____

Address: _____ Employment: _____

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Name: _____

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Athletic Coach of the Year – Female

Must be presently coaching in a middle/junior/high school in Alabama; have 5 years coaching experience in Alabama; and be an active professional member of ASAHPERD

Name: _____

Address: _____ Employment: _____

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Athletic Coach of the Year – Male

Must be presently coaching in a middle/junior/high school in Alabama; have 5 years coaching experience in Alabama; and be an active professional member of ASAHPERD

Name: _____

Address: _____ Employment: _____

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Must have made significant contribution to girls and women in sport in Alabama. Open to ASAHPERD members and non-members.

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