2015 Fall

Kentucky Association of Health, Physical Education, Recreation and Dance

[KAHPERD JOURNAL]

Volume 53, Issue Number 1

ISSN: 2333-7419 (Online Version)

ISSN: 1071-2577 (Printed Copy)

KAHPERD Journal
Volume 53, Issue 1, 2015 (Fall Issue)

ISSN: 2333-7419 (Online Version)
ISSN: 1071-2577 (Printed Copy)

TABLE OF CONTENTS

(Peer Reviewed Abstracts)

(Editorial Review)

(Peer Reviewed Articles)

2015 KAHPERD Board and Officers

President	Vicki Johnson-Leuze	vicki.johnsonleuze@louisville.edu
Past President	Jim Hinerman	jim.hinerman@eku.edu
President Elect	Jamie Sparks	jamie.sparks@education.gov
Executive Director	Jenny Dearden	J.dearden@moreheadstate.edu
Division Vice Presidents		
Health	Mike Ballard	michael.ballard@eku.edu
Physical Education	Meg Mabry	Meg.mabry@henderson.kyschools.us
Dance	Marianne McAdam	marianne.mcadam@eku.edu
Sports & Leisure	Keri Esslinger	Keri.Esslinger@wku.edu
General	Gina Gonzalez	g.gonzalez@moreheadstate.edu
At-Large Members of the Board of Directors		
East (2016)	Perri "Grover" Warren	Grover@groverwarren.com
West (2016)	Jennifer Pursell	hapyfet1@twc.com
East (2015)	John Ferguson	john.ferguson@eku.edu
West (2015)	Jamie Johnston	Jamie.johnston@henderson.kyschools.us
Section Chairs		
Elementary Physical Ed.	Jennifer Ball	jennifer.ball@kenton.kyschools.us
Secondary Physical Ed.	Bob Vanbruggen	bob.vanbruggen@sciencehill.kyschools.us
Adapted Physical Ed.	Kathy Carter	kathleen.carter@louisville.edu
Coaching	Stephanie Wooten Burnett	stefanie.wootenburnett@louisville.edu
Exercise Science Sport Management	Manuel Probst Joel Cormier	m.probst@morehead-st.edu joel.cormier@eku.edu
Leisure		
Student Chair	Whitney Anderson	whitney_anderson@mymail.eku.edu
Convention Manager	Deborah Campbell	Deborah.campbell@madison.kyschools.us
Exhibits Manager	Billie Stone	billie.stone@jefferson.kyschools.us
Silent Auction	Billie Stone	billie.stone@jefferson.kyschools.us
KAHPERD Journal	Steve Chen	s.chen@morehead_st.edu
KAHPERD Newsletter	Cheryl Harlow	charlow@windstream.net
Jump Rope for Heart	Joy Heines	Joy.Heines@jefferson.kyschools.us
Necrology	John Ferguson	john.ferguson@eku.edu
Am. Heart Assoc	Erika Furlong	erika.furlong@heart.org
Hoops for Heart	Amber Amstutz	amber.amstutz@campbell.kyschools.us
Awards Coordinator	Sue Banister	Sue.banister@twc.com
Webmaster	Cheryl Harlow	charlow@windstream.net
Division VP Elects		
Health VP-Elect	Laurie Larkin	laurie.larkin@eku.edu
Physical Education VP-Elect	Todd Farmer	farmert@lindsey.edu

Dance VP-Elect	Lydia Austin	lydia.austin@bourbon.kyschools.us
General VP-Elect	Paula Upright	paula.upright@wku.edu
Sport & Leisure	Daniel Hill	daniel.hill@fayette.kyschools.us
Section Chairs-Elect		
Elementary Physical Educ.	Robin "MeMe" Ratliff	meme3@bellsouth.net
Adapted Physical Educ. Elect	Angela Stark	angela.stark@fayette.kyschools.us
Research Elect	Travis Esslinger	francis.esslinger@wku.edu
Secondary Elect	Candace Young	candace.young@danville.kyschools.us
Sport Management Elect	Joel Cormier	joel.cormier@eku.edu
Coaching Elect		
Exercise Science Elect Recreation KAHPERD Secretary	AJ Mortara Tricia Jordan Barb Willoughby	Anthony_Mortara@berea.edu tricia.jordan@wku.edu b.willoughby@moreheadstate.edu

A Message from the KAHPERD President

To all you journal readers I give you greetings from your KAHPERD President. I want to thank Dr. Steve Chen, Journal editor and for all those writers who have contributed to this edition.

Our Fall Convention's theme is "Change, Challenge, and Opportunity." The plans are progressing well and will include the following: Sunday KDE will once again host a teacher's workshop in the evening; Monday, Dr. Bryant Stamford, Hanover College Professor of Kinesiology and Integrative Physiology and writer of *The Body Shop*, featured weekly in the *Louisville Courier Journal*, will be our keynote speaker in our General Session.

Thank you, the reader, for your continued involvement with the students in Kentucky. Your perseverance and dedication to your schools and students is an inspiration and part of what makes our profession strong.

Vicki Johnson-Leuze, Ph.D
President, KAHPERD

Acknowledgement

As the Editor of the KAHPERD Journal, I would like to show my appreciation to the following guest reviewers for their assistance in reviewing this current issue.
Dr. Manuel Probst, Morehead State University; Dr. Michael Bradley, Eastern Kentucky University; Dr. Monica Magner, Morehead State University; Dr. Johnny Newsome, Morehead State University; and Dr. Gina Gonzalez, Morehead State University.

Sincerely,
Steve Chen, KAHPERD Journal Editor

KAHPERD Journal Submission Guideline

SUBMISSION OF A PAPER

The KAHPERD Journal is published twice yearly (spring and fall) by the Kentucky Association for Health, Physical Education, Recreation, and Dance. The journal welcomes the submission of empirical research papers, articles/commentaries, best practices/strategies, interviews, research abstracts (spring Issue only) and book reviews from academics and practitioners. Please read the information below about the aims and scope of the journal, the format and style for submitted material and the submissions protocol. Your work will more likely to be published, if you follow the following guidelines thoroughly.
Articles are accepted via an electronic attachment (must be in Microsoft Word format, doc or docx) through e-mail to the editor before the deadline dates. Submissions should be sent to editor, Steve Chen: s.chen@moreheadstate.edu
Deadlines: Spring issue—March 1 & fall issue—September 1

AIMS AND SCOPE

The main mission is to bring together academics and practitioners to further the knowledge and understanding of issues and topics related to health, physical education, sport administration and marketing, exercise science, sport coaching, dance, and recreation, etc. We encourage submissions relating to these topics from a variety of perspectives.

CONTENT

All articles should be written primarily to inform senior practitioners and academics involved in areas of health, physical education, recreation and dance.
Research articles should be well grounded conceptually and theoretically, and be methodologically sound. Qualitative and quantitative pieces of research are equally appropriate. A good format to follow would be: Introduction, Literature Review, Methodology, Results, & Discussion, Conclusion, and Implication. Articles may include an abstract of approximately 150 words including the rationale for the study, methods used, key findings and conclusions. Article should not exceed 10 single-spaced pages (not including references, tables, and figures).
Reviews of books and/or reports are welcome (around 1000-2000 words). Information concerning the book/report must be sent to the editor.
Interviews (it would be nice to discuss with the editor beforehand) and best practice/strategy papers of 1,500-3,000 words should be objective and informative rather than promotional and should follow the following format: Objective/Background/Discussion and Practical Implication.
Research abstracts (300 words or less) are welcome and limited to the spring issue only. The submitted abstracts should have been presented (either an oral or a poster presentation) in the KAHPERD annual conference in the previous year.
*The editor is keen to discuss and advise on proposed research projects, but this is no guarantee of publication.

FORMAT AND STYLE

Manuscripts should follow the form of the guidelines for publications outlined in the 6th edition of the Publication Manual of the American Psychological Association.
Tables, charts, pictures, diagrams, drawings and figures should be in black and white, placed on separate pages at the end of the manuscript. They must be submitted photo ready and reproduced to

fit into a standard print column of 3.5 inches. Only one copy of each illustration is required, and captions and proper citations should be typed on the bottom of the table and diagrams. Jargon should be reduced to a minimum, with technical language and acronyms clearly defined. The accuracy of any citations is the responsibility of the author(s).
For more specific style questions, please consult a recent edition of the journal.

SUBMISSIONS PROTOCOL

Submission of a paper to the publication implies agreement of the author(s) that copyright rests with KAHPERD Journal when the paper is published.
KAHPERD Journal will not accept any submissions that are under review with other publications. All manuscripts submitted will be peer reviewed by 3 members of the editorial board. To be accepted for publication in the journal, the article must be approved by no less than 2 of the 3 reviewers. Authors will normally receive a decision regarding publication within six to 12 weeks. Rejected manuscripts will not be returned.

(Peer Reviewed Abstract)

An Integral Step in Your Graduate Career and Beyond

Chris Cantrell, Eastern Kentucky University
Brook Hensley, Eastern Kentucky University
Jamie Hunter, Eastern Kentucky University
Michael J. Bradley, Eastern Kentucky University

In order to be successful in life, one must establish creditability and make lasting relationships. Throughout their academic career, graduate students are constantly developing their resume and professional image. Conducting research, writing articles, and publication validates a graduate student's hard work. Publication can ensure that the graduate student is creating a portfolio that will enhance the student's professional and educational path.

In the span of their graduate education, students should take advantage of the many publication opportunities. Through publication, students create networking opportunities that can lead to future research projects, employment, or scholastic opportunities. The work that goes into research, writing, and the presentation/publication of this work enables graduate students to build connections with other students and professionals that share their same interests. This process can also make students aware of new research and trends in their field, and bring their attention to the areas where help and development is needed. This is an excellent opportunity for a graduate student to build their portfolio and adds validation to a student's research. Publishing work as a graduate student is an effective way for a student to differentiate themselves from their peers, making the student more marketable to employers. When students seek to publish their research, they are showing committment to their field of study. This commitment to the field can further add to the possibilities that lie ahead of the student, and will add to the level of credibility in which the student is attempting to build through the pursuit of an advanced degree.

Publishing research documents in well-known or popular outlets in the graduate student's field of study can aid the student in establishing themselves in their future career. As well as establishing credibility for the graduate student's research and communication skills, publishing literature can open doors for future employment, academic opportunities and research grants.

Keywords: publish, graduate school, research

(Peer Reviewed Abstract)

The Use of Analytics in Professional Sports

Emmette Knuckles, Western Kentucky University

In recent years the field of sports analytics has witnessed a genius of exciting and pioneering methods of data analysis and application to the player evaluation process as well as in coaching decision making. According to Alamar (2011) sports analytics is defined as "the management of structured historical data, the application of predictive analytic models that utilize that data, and the use of information systems to inform decision makers and enable them to help their organizations in gaining a competitive advantage on the field of play." By describing sport analytics in three different areas, Alamar (2011) defined predictive analysis as "the process of applying statistical tools to data to gain insight into what is likely to happen in the future." Alamar (2011) states that information systems "allow for visualization and interactive analysis of relevant information from multiple sources in one place, organized in a meaningful way to provide insights for decision makers".

NBA analytics department developed shooting proficiency metrics that account for location on the basketball court. Spatial shooting effectiveness (SSE) indicates the difference between a player's expected and actual point per shot. Zero (0) indicates the shooter is scoring at precisely the estimated rate. The larger the value the more effective the shooter is from a constellation of shots. SSE allows teams to quantify the accuracy in which a player is shooting from his favorite spots on the floor against the rest of the league or players at his position. (Goldsberry, 2014) Point over League Average (POLA) indicates the total points scored from the total number of field goals taken, scores are relative to the expected number of points from the player's shot constellation. Larger scores indicate a player is exceeding the point expectation with negative scoring indicating the opposite.

Franchises void of innovative analytics departments are disadvantaged, when competing to sign potential free agents that expect detailed analytical breakdowns during team presentations. There are increases in professional basketball operational spending to accommodate an analytics department. Sports analytics has evolved from a nerd's passion to an integral part of professional franchises' decision making.

Keywords:

References

Alamar, B. (2011, September 1). Beyond "Moneyball": The rapidly evolving world of sports analytics, Part 1. *Analytics-Magazine*. Retrieved from http://www.analytics-magazine.org/special-articles/391-beyond-moneyball-the-rapidly-evolving-world-of-sports-analytics-part-i

Goldsberry, K. (2014). Creating space to shoot: Quantifying spatial relative field goal. *Journal of Quantitative Analysis in Sports*, *10*(3), 303-313. Retrieved from http://www.degruyter.com/view/j/jqas.2014.10.issue-3/jqas-2013-0094/jqas-2013-0094.xml

(Editorial Review)

Publishing As a Graduate Student in Parks & Recreation: Showcasing Communication Skills and Work Ethic

Justin Kurtz, Eastern Kentucky University
Taylor Newsome, Eastern Kentucky University
Mary Beth Tew, Eastern Kentucky University
Michael J. Bradley, Eastern Kentucky University

Graduate school is different from undergraduate education in many ways; one of which is the amount of technical writing required to obtain a Master's degree. Graduate students should take advantage of the opportunities to publish well-researched documents. Some benefits to publishing for the graduate student are: providing graduate students with a wider variety of opportunities after graduation, offering a greater sense of personal accomplishment, and developing a deeper knowledge of the preferred field of study.

After graduation, a student must decide on one of many paths ranging from furthering their education with a Doctoral degree, to beginning a career in the professional workforce. Regardless of the next step, being a published author bolsters resumes in education and professional settings. Should the student decide to pursue a higher level of education, publications are an important requirement for entrance into many doctoral programs. Publishing not only showcases past research efforts, but also highlights the capability of the student for doctoral level technical writing.
Alternatively, if the student choses to enter the professional workforce, publications provide future employers with assurance the applicant or employee is skilled in communicating in written form. Listing multiple publications on a resume or curriculum vitae increases the marketability of a student to potential employers who view publications as a positive indicator of future success within the field. Publishing articles also provides immense networking opportunities among like-minded practitioners. Through the publication process, a student can interact with experts in the field of choice to gain knowledge and prospective, thereby creating contacts with potential employers.
Beyond the external benefits of publishing, a student can gain a greater sense of self-worth. Getting an article published takes hard work and discipline, therefor, seeing the end result in a published professional or academic outlet can give great personal satisfaction to the student. The act of following through a research process to the finished publication can give a student the confidence to pursue greater goals in settings beyond a purely academic exercise.

Preparing a manuscript for publishing is a complex process that gives the student in-depth understanding of their topic of study. Writing an article worthy of publication requires a great deal of research and commitment. As the student immerses themselves within the existing body of knowledge, they gain understanding of varying aspects of their topic. Understanding current knowledge and trends of the area allows the student to develop a greater perspective of current needs and how they can contribute to the profession and expanding the professional body of knowledge. Utilizing the opportunities provided in graduate school to publish articles gives graduate students a competitive edge in the education and professional fields. Publishing gives students the opportunity to present their hard work in a public forum. The student not only further develops their writing and research skills, but also gains experience while contributing to the professional literature of their field. With so many obvious advantages to publication, every opportunity for a graduate student to publish professional literature should be sought for the benefit of both the student and the profession.

(Peer Reviewed Article)

Assessing the Potential for Character Development through Participation in Athletics

John Farmer, Roanoke College, Salem, Virginia

Introduction

The notion that participation in athletics develops character has existed for many years. Parents involve their children in sports and expect that they will learn positive character traits as a result of their participation. The many examples of athletes that demonstrate poor sportsmanship and do not display positive character traits make many people question whether athletics participation has any positive impact on one's character. Coaches are busy going about the work of winning games, developing the skill level of their players, and teaching the various techniques and tactics that are related to their particular sport. How players act does not appear to be a priority for most coaches. In this study, character development through athletics will be assessed to see if an opportunity to develop positive character exists. According to Doty and Lumpkin (2010), "It has long been claimed that sports build character. That is, through participation in sports, athletes will learn and display positive character traits, such as integrity, self-discipline, respect, responsibility, self-control, and sportsmanship". Rudd (2005) discusses two types of character. The first being social character. This type of character displays social values like teamwork, loyalty, self-sacrifice, and perseverance. The second type of character that Rudd mentions is moral character which includes moral values such as honesty, fairness, responsibility, compassion, and respect. Rudd and Stoll (2004) compared athletes and non-athletes as well as team sport and individual sport participants to assess the type of character that they possessed. Non-athletes scored significantly higher on moral character than team sport participants. Individual sport athletes also scored significantly higher than team sport athletes on moral character. Team sport athletes scored significantly higher on social character than individual sport athletes and non-athletes. The individual sport athletes scored higher than the non-athletes on social character. This study indicates that sports may develop social character but there is no evidence that sports develop moral character. It is moral character that will be the focus of this article. Depending on one's definition of character, there may or may not be a perceived lack of character in sports today. Whether the past claim of sports building character has any merit or not, this topic is something that is worth researching further.

Character and competition

Character is difficult to define and measure. Lumpkin (2011) defines character as "the distinguishing moral or ethical qualities of an individual. Character is who a person is. Individuals are described as having character when they demonstrate positive attributes like benevolence, compassion, honesty, humility, loyalty, respect, and responsibility". Doty and Lumpkin (2010) states that "most research shows that as the level of sport competition increases, the level of character decreases. However, participating in sports, at any level can

and should build positive character". Bredemeier and Shields (2006) concluded that sports can build character but only if the coach is intentional in his or her efforts to do so. This study also found that coaches need to be well informed about the process that is required to build character.
Martens (2004) discusses the value of competition. He details how the striving to win and the commitment required to excel in sport help young people to develop positive qualities. Martens (2004) states that the element of competition in sport has value in yet another way. Through sport, young people can develop morally; they can learn a basic code of ethics that is transferable to a moral code for life. Competitive sport – in which winning is a valued prize – provides opportunities for high levels of moral development to occur.

This points to the competitive aspect of sport as the element that allows one's character to be tested and developed. This implies that participation in sports for recreational reasons alone would not allow for moral character development. Previous assertions suggest that while competitive situations provide the opportunity to develop character, those situations alone do not develop positive moral character traits. Instead, research shows that those competitive situations lessen the positive moral development of sport participants over time. Only when there is intentionality on the part of coaches and administrators does that competitive situation result in positive moral development.

Competition provides the opportunity to develop positive character traits but it can also be the catalyst for negative behaviors. Romand and Pantaleon (2007) stated that "competition could be what makes a sport morally questionable". They discussed how competition creates a complex situation for athletes. The win at all costs mindset requires athletes to figure out how to use rules to their advantage. At times deciding which rules to follow and which ones not to follow.

Corrion, Long, Smith, and d'Arripe-Longueville (2009) studied moral disengagement in competitive sport. Moral disengagement may explain some of the perceived poor behavior displayed by athletes during competition. This study found that the most commonly used moral disengagement mechanisms used in sport are "displacement and diffusion of responsibility, attribution of blame, minimizing or ignoring consequences, and euphemistic labeling". The ones that are used for projecting fault onto someone else and minimization of transgressions and their consequences are especially common in sports. Displaced responsibility refers to someone feeling that they are not responsible for their actions because they felt pressured or instructed to behave in a certain way. Diffusion of responsibility comes from a group acting together. This allows an individual to not feel personally responsible for his or her actions. Attribution of blame occurs when a person justifies behavior by feeling that he or she was provoked by others or that the circumstances caused a reaction. Minimizing or ignoring consequences is when one behaves poorly and rationalizes the behavior because it was part of reaching a goal or the consequences were not extreme. Euphemistic labeling occurs when someone may use softening language for the behavior that they engage in. For example, instead of calling a behavior bullying, one may refer to that behavior as teaching someone a lesson. While these moral disengagement mechanisms are not unique to sports, they help us understand some of the behaviors that we see during competition.

Gaines (2012) states that "while character development is not an inherent consequence of sport participation, there is considerable evidence that with deliberate efforts, by coaches and other adults, an environment that fosters the development of character in young athletes can be created". Gaines (2012) provides four guidelines for developing character. Setting character goals is the first guideline. In this step it is said that it is important that the coach follow the guidelines so that the athletes do not receive conflicting messages. The second step is establishing character guidelines. This involves setting specific actions for the team to engage in and consequences when violations occur or rewards when positive actions are observed. The third guideline involves using peer leaders, or captains. Gaines (2012) states that "Peer leaders are in a powerful position to both establish and maintain the character climate of a team". These leaders should be chosen carefully to ensure that they embody the traits that are necessary for the positive character development of the team. The last guideline is to provide opportunities to develop character. Character development is a constant process and requires regular attention.

Doty (2006) furthers the notion that character development through sport requires focus by stating can positive character traits be developed through a sporting experience? Absolutely. But it will not happen by chance or hope. It can and will only happen when coaches, teachers, and administrators make a conscious decision to make character development an outcome (objective) of the sports experience."

In her book, Modern Sports Ethics, Lumpkin (2010) explains the synergy between character development and sport. Lumpkin states that "athletes can be educated about what character is, what it looks like, and how to live principled lives". She goes on to list five steps that can be taken to build character. The first being to model "what character is, shaping and continuing to mold moral values, and consistently reinforcing and praising the ethical behaviors of young athletes". The second step listed is "teaching what it means to treat opponents, officials, and teammates honorably and respectfully while following the letter and spirit of the rules". The third step that she gives is to model how to handle situations that test character. The fourth step is to shape the way that players think so that character becomes more important than winning. The last step given is to reinforce "how character is displayed in sport, such as through sportsmanship and fair play, and how moral values can be applied in other aspects of life".

Conclusions

In summary, participation in athletic activity does not automatically result in positive character development. In fact, there is evidence that suggests that the longer a person participates in competitive sports, the less moral character that person displays. A number of studies have shown that participation in athletics does not develop character. Participation in sports has been shown to develop an increase in social character but not in moral character. In order for positive moral character development to occur from participation in athletics, there must be a planned and organized focus on character development. Some methods for the planned development of character through sports have been provided. More study needs to be conducted to determine how truly effective these methods for producing positive moral

character development through participation in athletics can be. Providing effective methods for developing character will enable more coaches to have the tools to potentially be successful in this area. Sport participation does not develop character, good coaches that are intentional about developing character do.

References

Bredemeier, B. & Shields, D. (2006). Sports and character development. *President's Council on Physical Fitness and Sports*, *7*(1), 1-6.

Corrion, K., Long, T., Smith, A., & d'Arripe-Longueville, F. (2009). "It's not my fault; it's not serious": Athlete accounts of moral disengagement in competitive sport. *The Sport Psychologist*, 23, 388-389.

Doty, J. (2006). Sports build character?! *Journal of College and Character*, *7*(3), 1-9.

Doty, J., & Lumpkin, A. (2010). Do sports build or reveal character? An exploratory study at one service academy. *Physical Educator*, *67*(1), 18-33.

Gaines, S. (2012). Theory into practice: Developing individual and team character in sport. *Strategies: A Journal for Physical and Sport Educators*. *25*(8), 30-33.

Lumpkin, A. (2009). *Modern sports ethics*. Santa Barbara, CA.: ABC-CLIO, LLC.

Lumpkin, A. (2011). Building character through sports. *Strategies: A Journal for Physical and Sport Educators*, 24(6), 13-15.

Martens, R. (2010). *Successful coaching* (3rd ed.). Champaign, IL: Human Kinetics.

Romand, P., & Pantaleon, N. (2007). A qualitative stud of rugby coaches' opinions about the display of moral character. *The Sport Psychologist*, *21*, 60.

Rudd, A. (2005). Which "character" should sport develop? *Physical Educator*, *62*(4), 205-211.

(Peer Reviewed Article)

Facility Operations: Financial, Venue, and Environmental Sustainability

Sherria Hester, Western Kentucky University

Abstract

Imagine if underpaid and burned out employees operated a popular concert venue that attracted large crowds and sold out shows. Unfortunately, the venue spends most of its finances on repairs causing a decrease of revenues to the construction costs. This scenario is an example of a director or manager's worst nightmare. Fortunately, sustainability research and design can help lessen a manager's overwhelming to-do list. Sustainability and "green" design is an increasing focus among architects, construction companies, and facility managers especially in venues expecting high volumes of energy and natural resource consumption. Existing facilities are also researching and developing methods to conserve the use of energy and natural resources to improve indoor and outdoor environments. Applying these innovations and methods can range between "hassle-free" or costly yet provide long-term and beneficial advantages financially and environmentally. This article identifies general methods and advantages of sustainability and green practices amongst sport and recreational financial budgets, building/venues, and the surrounding environment.

Financial Sustainability: Methods and Advantages

The scenario of underpaid and burned out facility workers could be a result of overspending in construction, the demanding need to make repetitive repairs within the facility, or perhaps a facility is still affected by the economic recession. *Solutions to Your Budget: Partnerships, Cutbacks Help Budget Difficulties* by Deborah Vence provided five ways to approach a struggling budget for facility operation. Two of them are extremely important before one can move forward with implementing a well-sounded plan. The first approach is to "identify the problem". Determine if it is the budget, the amount of funds available, or possibly the pricing of products and services. The second approach is to "take action". Replacement of staff, removal or addition of the programs, and renewal contracts with different service or product providers are examples of solutions that may be beneficial to a facility's budget.

A plan for financial sustainability is pertinent in maintaining, gaining, and marginalizing funds. Vence (2014) defined a plan for financial sustainability as a tool used to help the organization or initiative- and more importantly, it goals- thrive. Sustainable concept allows for the plan to continue thriving over the long term. Vence (2014) suggested streamlining operations means making sure revenues are where they need to be financially. Although literature was aimed towards non-profit organizations such as Green Sports Alliance, which is an organization whose mission is to help sports teams, venues, and leagues enhance their environmental performance, the plan can be useful in developing a for-profit budget as well. Reviewing gaps, forming partnerships, and creating innovative ways to market the business/facility are other options to cut cost or gain additional revenues. Proper

implementation of the mentioned financial practices will increase the likelihood of a sustainable budget.

Building/Venue Sustainability

It can be assumed traffic volume is high within a facility that accommodates a copious amount of people as well as the usage of utilities (i.e. lights, electricity, and water). Buildings account for sixth of the world's fresh water withdrawals, one-quarter of its wood harvest, and two-fifths of its material and energy flow (Dick, 2014). A "green" or "sustainable" facility is a structured designed, built, renovated, or operated in an ecologically and resource efficient manner (Dick, 2014). Advantages of "green" practices within a facility are but not limited to: conservation of natural resources, energy efficiency, and an improved indoor and outdoor environment. Overuse of natural resources could potentially lead to depletion and become a threat to the environment. A less expensive way of "greening" a building is by "snatching low hanging fruit" which means a facility manager could begin by turning things off when not in use, implementing low cost solutions such as aerators on faucets and adding weather stripping on doors (Curtland, 2014).
Efficiency is a key element in green-design. Green building methods cannot be impactful unless mangers and staff are informed and disciplined to the operation and maintenance of the facility and its equipment. Performance measures, audits, adjustments, and upgrades allow a manager to determine the efficiency of green practicing overtime.

Face the Facts

Perhaps you may have attended a sustainability conference as a manager, and your staff is also quite intrigued about the long sustainability lecture during the meeting. *Interest in Stadium and Sustainability Continues to Grow* by Paul Steinbach (2013) would make a great momentum shift in the lecture. The literature focused on how sustainability is a growing trend within stadiums, arenas, and colleges. It also discussed a 2013 National Resource Defense Council report, the first of its kind, which highlighted college sport sustainability at 30 college universities. College universities are becoming "game changers" and have joined the movement. Other report findings include:
• At least 216 collegiate sports departments have installed recycling infrastructure throughout their sports facilities
• At least 146 collegiate sports departments have invested in more energy efficient practices by upgrading their lighting and controls.
• At least 116 collegiate sports departments have upgraded to water efficient fixtures.
• At least 88 collegiate sports departments have pursued LEED green building design certifications, with at least 24 certified sports venues to date. And,
• At least 23 sports departments have installed on site solar production systems. (Powers, 2013).

The professional sport venues also scored big in sustainability statistics. Here are some of the highlighted results (Curtland, 2014).
• San Francisco Giants' AT & T Park- amendments to the infield mix (now 50% sand, 25% silt, and 25% clay) has reduced field watering by one-third.

• The Staples Center- A lighting retrofit replaces almost 3,000 halogen fixtures with LEDs, saving $80,000 per year
• Philadelphia Eagles Lincoln Financial Field- Energy conservation programs and management systems reduces consumption by over 33%.
• Baltimore Ravens M & T Bank Stadium- Encourage public transportation, with 10% of visitors using the MTA Light Rail service and 2% percent arriving via "Ravens Ride" buses
• Miami Heat American Airlines Arena- In one year the Heat attracted $1 million in new corporate sponsors through greening efforts, including Home Depot and Waste Management, while also saving $1.6 million by reducing energy.

Environment and Occupant Health

Communities, fans, students, and teams are all engaging in a common issues to create better performance and spectator environments (Curtland, 2014). Educating the fans and spectators of a venue is as necessary as educating the staff. Involving and educating the community in sustainability practices help promote a "green" environment. Alice Henly, who directs the NDRC's college work, made a statement regarding how colleges sports fans are the largest sports fan base and how they are some of the most highly educated and affluent sectors of the American public (Steinbach, 2013). She believes it's a great opportunity to change the conversation around environmental challenges and to broaden the dialogue around energy efficiency.

Green-building policies is a new developing topic, especially within buildings and infrastructures. Seattle was one of the first cities to adopt a green building policy in 2000 (Steele, 2007). The green-building policy utilizes LEED standards and requires all city departments, offices, and contractors responsible for the financing, planning, designing, developing, constructing, and managing of city-owned facilities over 5,000 feet to be sustainable and achieve LEED silver rating (Porteshawver, 2009). Establishing a sustainability team would ensure that a facility operated efficiently as possible. Michael E Pfahl describes the sustainability team as a planning and policy making team. The staff's unique competencies and skills set is an impact on internal organization operations (e.g. green mission statements and vision statements) and the external world of its stakeholders (e.g. fan behavior changes such as recycling at an event).
In *Urban Green Spaces and an Integrative Approach to Sustainable Environment*, Atiqul (2011) explains the benefits and the challenges of urban green spaces based on different results from different studies as well as how green spaces play a role by social, economic, cultural, and environmental aspects of development. Urban green spaces can also be a tool for long term protection of the environment. Sport and recreation facilities that are located in urban areas can potentially compare and apply the results of the studies to their facilities such as how pollution control, biodiversity, and conservation. Social and psychological advantages include people satisfying their wellbeing.

Summary

There are various approaches a manager can utilize regarding financial, venue/building, and environmental sustainability. Sustainability itself has a long term impact on the longevity of

its daily operations, finances, and environment. It is pertinent that a manager and facility staff is disciplined and knowledgeable of green research, design and practices in order to be successful which could then be inherited by the community, spectators, and fans. To ensure a facility's success in sustainability a manager should consider establishing a sustainability team and supporting "green-design" policies as a part of the facility's culture. Sustainability will allow room for growth in business, reduced costs, and revenue generation; it is suggested to implement lost cost improvements, or snatch low hanging fruit, to cut energy usage and water usage if upgrades and renovations are outside of the operating budget (add a citation here). Contracting and partnerships services (e.g. waste disposal services) that are eco-friendly is also an example solution to saving money and protecting the environment. Day to day operations and duties of facility managers and staff become less of a hassle and provide an environmentally safe and efficient building for fans and spectators if sustainability methods and practices are properly implemented.

References

Atiqul, S., (2011). Urban green spaces and an integrative approach to sustainable environment. *Journal of Environmental Protection, 2*, 601-608. Doi: 10.4236/jep.2011.25069

Curtland, C. (2014, October 01). *Stadium tackle sustainability.* Retrieved from http://buildings.com/article-details/articleid/18021/title/stadium-tackle-sustainability.aspx

Dick. G. (2014). *Green building basics.* Retrieved from http://www.calrecycle.ca.gov/greenbuilding/

Gibson, F., Lloyd, J., Bain. S., & Hottell, D. (2008) Green design and sustainability in sport and recreation facilities. *The Smart Journal, 4*(2). Retrieved from www.thesmartjournal.com/greenissues.pdf

Porteshawver, A. B. (2009). Green sports facilities: Why adopting new green-building policies will improve the environment and the community? *Marquette Sports Law Review. 20*(1), Retrieved from http://scholarship.law.marquette.edu/sportslaw/vol20/iss1/11

Powers, J. (2013, August 26). *New report: College sports tackling sustainability.* Retrieved from http://nrdc.org/media/2013/130826

Steinbach, P. (2013, December). *Interest in stadium and arena sustainability continues to grow.* Retrieved from www.athleticbusiness.cin.stadium-arena/interest-in-stadium-and-arena- sustainability-continues-to-grow.html

Vence, D. L. (2015). *Solutions for your budget: Partnerships, cutbacks help manage budget difficulties.* Retrieved from http://recmanagement.com/feature_print.php?fid=201409FE01

(Peer Reviewed Article)

Increasing Sustainable Use Practices in Natural Areas: A Multi-Tiered Review of LNT Programs

Carlet Hagan, Western Kentucky University

Introduction

"Nature Deficit Disorder" is described by Richard Louv as a disconnection with the environment that stems from the current generation's tendency to focus on built and engineered entertainment rather than the natural world (Louv, 2005). A continual momentum continues for youth and teenagers to explore and participate in outdoors. One aspect included in many outdoor recreation programs is Leave No Trace, which is an educational program teaching people of all ages how to enjoy the outdoors responsibly, and is the most widely accepted outdoor ethics program used on public lands (Trace, 2012). According to Blanchard & Buchanan (2011), environmental stewardship is the responsibility for environmental quality that should be practiced by individuals, communities, companies, and government organizations.

Seven Leave No Trace (LNT) principles are at the core of educating youth and adolescents; teaching outdoor ethics. The principles consist of: 1.) plan ahead and prepare, 2.) travel and camp on durable surfaces, 3.) dispose of waste properly, 4.) leave what you find, 5.) minimize campfire impacts, 6.) respect wildlife and 7.) be considerate of other visitors. Ultimately the seven principles can be applied anywhere: wilderness areas (also known as "backcountry"), city parks, backyards, (referring to modern day terminology of "frontcountry") and any recreational endeavors (Morley, Chase, Day, & Lawhon, 2013)**.** The primary goal of LNT is to extend responsible outdoor ethics and behaviors to users of the natural and man-made environments.
Leave No Trace, developed by the U.S. Forest Service in the 1970's (Marion & Reid, 2007), is a program using the "do's and don'ts" in visitor education by developing messages that encourage visitors to consider environmental and use-related factors (Marion & Reid, 2007). The organization's mission is to promote and inspire responsible outdoor recreation through education, research and partnerships, with a focus on non-motorized recreation (Trace, 2012). "LNT was formally adopted in 1993 by the four primary federal land management agencies and has seen widespread adoption across the United Stated and abroad" (Vagias, Powell, Moore, & Wright, 2014, p. 440).

According to Turner (2002), opening the backpacks, leafing through the guidebooks, and revisiting the campsites reveals more than just changes in the ways people have returned to nature. "Starting in the 1910s, many middle-class families began motoring into the outdoors, camping by roads, streams, and high mountain meadows, and, on big trips, setting their sights on the nation's national forests and national parks" (Turner, 2002, p. 464). During the 1980's, heavy traffic of users and visitors sparked the "great new wilderness debate" increasing awareness of protecting and preserving the wilderness. Practicing the Leave No Trace

principles allowed an ever-growing number of backpackers to visit wilderness, while leaving its ecological integrity intact (Turner, 2002).

Land managers charged with resource protection in National Parks and other recreation parklands see visitors making an imprint on resources from vegetation trampling, trail erosion and degraded cultural resources due to visitor crowding (Marion & Reid, 2007). Since rules and regulations have a negative connotation to visitors, land mangers use visitor education programs, such as Leave No Trace, to enhance ethical behavior and self-directed modification, to persuade and encourage low impact visitor behavior in recreation settings (Marion & Reid, 2007). Fire control and fire management managers are providing some general techniques, including use of natural cleanings, natural barriers, and "leave no trace" camping to minimize the impacts of fire destruction (Backer, Jensen, & McPherson, 2004).

Some techniques for reducing impacts are using a light-weight stove for cooking and enjoy a candle lantern for light. Where campfires are permitted, the use of a fire rings or a pan is better for the environment. Another technique is to keep fires small by using only sticks from the ground that can be broken by hand. Lastly, campfires should be put out completely, then scatter cool ashes (Trace, 2012).

Leave No Trace principles can be seen in many parks and protected areas by use of signage, in educational and promotional materials, and included in interpretive information and programs. An on-site survey administered to 390 individuals at Bear Lake in the Rocky Mountain National Park investigated day-use visitor knowledge, behavioral intent, and beliefs concerning the park (Lawhon, Newman, Taff, Vaske, Vagias, Lawson, Monz, 2013). The participants were asked how likely they were to engage in future Leave No Trace behaviors and practices. On every survey but one, respondents indicated they were "extremely likely" to practice Leave No Trace in the future (Lawhon, et al., 2013). This study found the importance and need for park visitors to better understand why certain Leave No Trace practices are recommended and why those practices are effective at reducing impacts (Lawhon, et al., 2013). "Studies that focus specifically on Leave No Trace in frontcountry contexts may be most beneficial to both the Leave No Trace Center for Outdoor Ethics and land managers as trend data indicate that continued increase in front country recreation is likely to occur in the future" (Lawhon, et al., 2013, p. 34).

Leave No Trace programs are used to encourage a variety of outcomes, including promoting conservation behaviors, raising awareness, decreasing depreciative behavior, increasing knowledge, influencing attitudes, and enhancing the visitor experience (Vagias, Powell, Moore, & Wright, 2014). A study in Olympic National Park, Washington evaluated the effectiveness of an extended version of the Theory of Planned Behavior for predicting backcountry visitors' behavioral intentions to comply with recommended Leave No Trace practices (Vagias, et al., 2014). Two hundred and forty eight participants who traveled overnight in backcountry wilderness at Olympic National Park, were surveyed upon their pre-trip arrival and at permit issuing stations within the park during the summer of 2007. "One finding suggests that targeting how backcountry visitors perceive the difficulty in carrying out recommended LNT practices likely to be most influential for modifying behavioral intentions to comply with LNT practices promoted within Olympic National Park" (Vagias,

et al. p.453). The researchers found future strategic communication and education efforts need to focus on knowledge, the social expectations regarding the appropriateness of performing LNT behaviors, and the ease of performing these techniques as mechanisms to increase the adoption of recommended LNT practices (Vagias, et al. 2014).

References

Backer, D. M., Jensen, S. E., & McPherson, G. R. (2004). Impacts of fire-suppression activities on natural communities. *Conservation Biology, 18*(4), 937-946.

Blanchard, P. B., & Buchanan, T. K. (2011). Environmental stewardship in early childhood. *Childhood Education, 87*(4), 232-238.

Bromley, M., Marion, J., & Hall, T. (2013). Training to teach Leave No Trace: Efficacy of Master Educator courses. *Journal of Park and Recreation Administration, 31*(4), 62-78.

Lawhon, B., Newman, P., Tatt, D., Vaske, J., Vagias, W., Lawson, S., & Monz, C. (2013). Factors influencing behavioral intentions for Leave No Trace behavior in national parks. *Journal of Interpretation Research, 18*(1), 23-38.

Louv, R. (2005). *Last child in the woods: saving our children from nature-deficit disorder* (1st ed.). Chapel Hill, NC: Algonquin books of Chapel Hill.

Mainella, F. P., Agate, J. R., & Clark, B. S. (2011). Outdoor-based play and reconnection to nature: A neglected pathway to positive youth development. *New Directions for Youth Development*, 130, 89-104.

Marion, J., & Reid, S. E. (2007). Minimising visitor impacts to protected areas: The Efficacy of low impact education programmes. *Journal of Sustainable Tourism, 15*(1), 5-27.

Miller, J., Shellman, A., Hill, E., Ramsing, R., & Lawhon, B. (2012). The development and validation of the Leave No Trace PEAK Assessment Scale (PAS). *Research in Outdoor Education, 11*, 47-62.

Morley, L., Chase, M. R., Day, R. W., & Lawhon, B. (2013). Conviction of the heart: Implementing Leave-No-Trace principles in outdoor recreation. *Journal of Physical Education, Recreation & Dance, 79*(7), 29-34.

Trace, L. N. (2012). Leave no trace. *Center for Outdoor Ethics.* Retrieved from https://lnt.org

Turner, J. M. (2002). From Woodcraft to 'Leave No Trace' Wilderness, Consumerism, and Environmentalism in Twentieth-Century America. *Environmental History, 7*(3), 462-479.

Vagias, W. M., Powell, R. B., Moore, D. D., & Wright, B. A. (2014). Predicting behavioral intentions to comply with recommended Leave No Trace practices. *Leisure Sciences: An Interdisciplinary Journal, 36*(5), 439-457.

(Peer Reviewed Article)

Capturing Physical Education Teacher Performance: Considerations and Ethical Conducts for Teachscape and Other New Technologies in the Classroom

Minhyun Kim, University of New Mexico
Glenn Hushman, University of New Mexico
Mike Stocz, University of New Mexico

Abstract

The use of video technology for capturing and analyzing teaching practice is emerging as a powerful assessment and improves teaching practice in physical education. Teachscape is a set of video recording tool which consists of I-pod, tripod, lens and microphone. The purpose of this present study was to examine the benefits and challenges on using Teachscape regarding physical education teachers' effectiveness. Results showed that the benefits of Teachscape include: (1) it is easy to carry and set up; (2) it covers covers a wide range of angles (wide-angle lens); (3) the data are considered permanent; (4) observers can revisit according to their need, and (5) it is convenient to analyze data. However, there are some challenge factors using Teachscape. These are: limited memory capacity, inconsistent sound quality, (outside class) large observed filed, limited battery capacity, distraction for the class (both instructors and students) and time-consuming. This examination also includes supplements to Teachscape to enhance the classroom setting. In short, it is fairly simple to use Teachscape. Therefore, it is highly recommended that practitioners should be familiar with each function of Teachscape and have accurate executing skills by practicing and observing a skilled performer.

Introduction

The current educational reform movement in the United States has resulted in a greater focus on teacher performance as it relates to student achievement (U.S. Department of Education, 2009). Determining the best way to measure a physical education teachers' effectiveness is under constant debate. While debate over how to measure the quality of an instructor continues, physical education teachers should begin to prepare to meet the demands of capturing teaching performance. While there currently exists a variety of systems teachers can use to capture instructional performance, the most common observational protocol used in public schools is Charlotte Danielson's Framework for Teaching (FFT) (Darling-Hammond, 2010).

FFT is a valid and reliable assessment of teacher performance in physical education, and is currently the most common method to measure teacher performance from PK-12 in the United States. FFT includes four domains of teaching responsibility. These are: (1) planning

and preparation, (2) the classroom environment, (3) instruction and (4) professional responsibilities. Each domain identifies an aspect of the teacher's role and can be evaluated.

With FFT, the main method of assessing teachers' performances is through video observations and rubrics. Video observation is usually a fairly simple, easy and powerful way to capture a teacher's performance (Rickard, McAvinia & Qurke-Bolt, 2009). In some instances, incorporating video equipment into the classroom has aided students in grasping the content being delivered and helped in developing social skills (Goodyear, Casey, & Kirk, 2014).However, large video camera devices are often expensive and difficult to set up and take down. This article will aid educators in determining which form of video equipment would best suit their needs within the classroom, while also reviewing Charlotte Danielson's FFT in more detail.

Teachscape has developed a video recording unit to make capturing teacher performance much easier. Teachscape is a set of video recording devices commonly used in conjunction with FFT. It has been widely used to capture teachers' performances and consists of a tripod, a lens and a microphone. It is easily designed for practitioners to use and to capture a teachers' performance. Teachscape video observation allows educators to evaluate teachers' performances by using rubrics, which are provided by FFT. By combining FFT with the Teachscape video recording system, teachers are able to objectively analyze teaching performance and consider options for professional growth (Dymond & Bentz, 2006). The purpose of this article is to describe the benefits and challenges of using Teachscape in physical education environments.

Benefits of Teachscape

Teachscape equipment is easy to carry and set up. The whole package goes into a small, hard case carrier bag weighing seven pounds. It is convenient to use because requires approximately 30 seconds to set up and take down. Set up includes attaching an Apple iPod to a small tripod with an optional microphone-recording device. Teachscape can cover a wide range of angles by using a wide-angle lens. A portable and detachable wide-angle lens allows the user to take angle shots that are 0.67 times wider. The tripod provides a variety of positions both horizontal and vertical. Therefore, it is important to find the appropriate position relative to what are intended to be recorded. If the user has more than two Teachscapes, it allows multi-tasking meaning two Teachscapes can be set up in different places or record two different classes at the same time. Lastly, recording data could be permanent and can be viewed at any time for convenience. Data can also be downloaded to a variety of computer devices for long-term storage. Using a Teachscape device results in a convenient and easy way to capture and analyze physical education teachers' performances.

Teachscape's Reflect Live

Teachscape released an app version, *Reflect Live*, to further aid in developing educators. The app is available on iTunes and works with iPads. This app requires an independent observer to record details about the instruction, which can be compared to a variety of rubrics. *Reflect Live* allows for instructors to detail how they prepared for the class (a pre-visitation) and how

they feel the class went (post-visitation), and allows for evaluators to include their own observations of the individual. The observation's details are automatically set to compare against a pre-loaded rubric, but users can upload a different rubric (such as the one proposed below). The pre-loaded rubric follows Charlotte Danielson's Framework for Teaching, which is described in greater detail below. This software then allows for the observer to select a level of proficiency for the instructor, which allows a comparison to more appropriate rubrics. Overtime, instructors can see their progress with continual use of *Reflect Live*.

Evaluation Using Rubrics

While the primary use of the Teachscape devices are for capturing video footages of teacher performance, the company also provides a variety of rubrics to measure teacher performance. Examples of rubrics are available at the Teachscape website (www.teachscape.com). The rubric contains an overview of criteria such as language, critical attributes, and teaching and learning examples. While the supplied rubrics are certainly not a requirement, they offer suggestions for educators, administrators and schools to identify and evaluate teachers' performances. Many schools districts have opted to use the Teachscape devices in conjunction with FFT.

When FFT is used to capture teacher performance, each frame in Teachscape includes multiple sub-rubrics. For example, in the domain 1rubric (Table 1), which is planning and preparation, there are six sub-rubrics. These are: (1) demonstrating knowledge of content and pedagogy, (2) demonstrating knowledge of students, (3) setting instructional outcomes, (4) demonstrating knowledge of resources, (5) designing coherent instruction and (6) designing student assessments. These specific rubrics show the important concepts, tasks and skills that teachers should demonstrate and know. The rubric guideline describes how to evaluate each domain, providing various examples of teaching core elements of components and indicators (see Table 2).

Challenges of Teachscape

While Teachscape offers a convenient method to video record teacher performance, it is not without its challenges. In fact, problems with Teachscape are not dissimilar to problems related to any other recording device. First, Teachscape has a limited memory capacity and recording time. Once the device reaches full memory capacity, data can no longer be saved. Thus, it is recommended that the memory capacity be noted before using Teachscape. Each recording capacity is 50 minutes. Second, the battery charge on the iPod only lasts three hours. Therefore, the device often needs to be charged between teaching sessions. Finally, there is a significant challenge capturing the teacher's voice when delivering lessons in a gymnasium or outdoor setting. In order to evaluate physical education teachers' performances, it is important to obtain a high quality recording of the instructors' voices. This provides evidence of effective verbal cues, which is critical in terms of evaluating a physical education teachers' effectiveness (Andrew, Cobb & Giampietro, 2005). Teachscape does include a microphone to capture the instructor's voice. Once the user connects the microphone to the I-pod and pushes the small button located in the center of the microphone, it captures all sounds. However, when viewing videos, it is hard for evaluators to listen to the

instructors' voices clearly due to distracting noises and sounds that are also captured in the recording. The microphone is relatively effective when the class is in a small gym or other space with quality acoustics. However, if the microphone is used in a larger space, there may be some problems with sound quality. In order to reduce the negative effect of ambient noise, it is highly recommended that a wireless microphone be used in place of the stationary microphone provided by Teachscape.

While not necessarily defined as a challenge, another one of the critical considerations for when using Teachscape successful is the location of its use. First, although the tripod helps maintain the stability of the Teachscape device while recording, it can easily be knocked over if hit by a ball or participants in a physical education class. Thus, the device should be kept in a location that is not easily struck by flying objects or moving students. Second, it is difficult to record sessions that are held outside because of the limited lens and angle size. For example, in a soccer class or baseball class, which requires a large outdoor space, it is almost impossible to capture the activity of the entire field and the instructor's performance, even when using a wide-angle-lens. Finally, once the Teachscape is set up and recording begins, it might distract both teachers and students. Recognize that the video recording process can cause anxiety and possible resistance from teachers. According to Fuller and Manning (1973), those who are filmed in the class tend to show stress because the video is "a novel, powerful source of information about those aspects of the self which are perceived by others but not by the self" (p. 511).

Supplements to Teachscape

Dartfish Express is an app that is available on phone devices, and can be used as a means of student evaluation. This app allows for video recording, with frame-by-frame stopping capabilities. Instructors can use this app to give students feedback for each step in a process, for aiding in sport-related drills (such as free-throws for basketball), and video can be sent via social media platforms and e-mail. Thus, this tool allows instructors to work after class to see how individual students can improve their form in various activities. For example, the FFT rubric asks for instructors to demonstrate knowledge of students, set instructional outcomes, demonstrate knowledge of resources, and design student assessments. Instructors using Dartfish Express can suffice all of these requirements by demonstrating how students can improve their technique by offering instruction via video analysis, prioritize goals based on the film, use technology in the classroom effectively, and could even use this app in assessing a student's grade. To further this example, a student may be playing basketball for the first time in a physical education class. If the teacher makes a daily video clip using this software, overtime, the teacher should see improvements, given that the teacher follows through with assessing and giving helpful feedback to the student. If the student cannot shoot free-throws on the first day, the instructor might record a shot of the student solely and offer feedback via e-mail for the student to bend their knees more, bring in their elbow, etc… This process would continue throughout the student's development.

Instructors should supplement their lesson plans with other applications, such as My Fitness Pal and Fitbit. First, My Fitness Pal is an online forum that allows individual to keep an online log of their current exercise and eating habits. Instructors should take a class period to

show students this software, which can give them a clear, unbiased representation of the calorie intake they should be at per day. This software will help demonstrate the instructor's knowledge of resources, and can improve the quality of learning the health benefits of physical activity. Second, Fitbit has developed a watch that records walking patterns, how many calories burned in a day (based off of physical activity and reported weight), sleeping patterns, and a history of steps walked in a day. This app can help students understand what their body actually needs in terms of caloric intake, although this lesson needs to be furthered by physical educators and Fitbit should not be seen as a means to get out of teaching an important life lesson. This also helps with demonstrating knowledge of resources as well as demonstrating knowledge of content and pedagogy by aiding students in developing long-term health benefits.

TeacherKit is another app that instructors would find useful in helping to meet the standards of Teachscape. This tool allows users within a physical educator's class to see their attendance, any feedback the instructor has for them, and overall progress of the class. This app will help instructors prove they are up-to-date on resources, and this application will allow parents to see how their students are performing in the class (given the student either is at the age where parents are allowed to access this material or the students gives their parents permission to view their performance).

Ethical Considerations

Those of us within the physical education profession need to keep in mind that personal biases can have a lasting effect on a student throughout their life. Students come from a variety of backgrounds, and may show up to our classes out of shape, improperly trained, or vehemently resistant to physical education in general. Thus, when the authors suggested that these technologies be added to the classroom, it is with the highest level of ethical consideration that these technologies should be added; anything less will inhibit one's development. For example, if an instructor does not add in notes about a particular video clip produced by Dartfish, then the student may not understand where they went wrong. Should this instructor post embarrassing athletic acts on social media websites, this could also negatively affect a student's ambition to excel in physical education (and terminate the educator's job). Encouraging an atmosphere of improvement through technology can be extremely beneficial to progression in a classroom, and will show through all forms of teacher evaluations.

The presence of a camera may frighten students in the classroom, but the authors recommend implementing use of a camera within their curriculum as a means of aiding students. That way, when an evaluation comes via the Teachscape camera and tripod, students will be used to having a video component to the class already. Physical education teachers should also make their students aware of when these cameras will be in the classroom (when possible, AKA if there is a planned evaluation).

The authors also recommend that multiple professionals related to the field of physical education review the instructor versus the rubrics provided by Teachscape. This will help cut down on biases by allowing multiple individuals' interpretations of the rubric to show

through in their analysis. Three viewers would be recommended for this process, and instructors would have a variety of suggestions on how to improve their classes as well.

Recommendations

In order to improve evaluation reliability and validity while using Teachscape, it is highly recommended that practitioners are required to receive training. The main part of the training helps practitioners use the custom rubric accurately and improve consistency of observations. The Teachscape website (www.Teachscape.com) offers both face-to-face and on-line training sessions. On-line training would be effective for those who cannot afford to participate in the face to face training. It can be accessed anytime conveniently and cost-economically. The training enables practitioners to practice rubric scoring by watching a set of sample video clips along with evaluation guidelines. In addition, there are numerous examples of video clips so that practitioners are able to practice and improve decision making. This training also allows practitioners to realize the importance of avoiding personal bias and preference about a person who is observed. Obviously, each person has some types of preference and bias; however, such biases hinder the process of observation and evaluation. It is most important that practitioners be able to evaluate based on the custom rubric without any personal preference or bias. Accurate and fair observation and evaluation can increase trust in the whole evaluation process. These high standards will continue to build a strong evaluation system.

Summary

The educational reform movement has resulted in a need for an observational protocol to measure teacher performance. Observational protocols, such as FFT, are quickly becoming a common requirement to measure teacher performance in educational environments. Furthermore, Teachscape devices are becoming the most common current method to capture teacher performance on video so it can be assessed at a later date. While the teaching effectiveness reform movement is primarily focused on core subjects at the moment, there is little doubt physical education will also be held accountable in the near future. Therefore, it is in the best interest of physical education teachers to learn how using observational protocols combined with a Teachscape device can improve evaluation of teaching performance. Not only does this help prepare for future changes in educational policy, it also provides valuable feedback for physical education teachers to grow as professionals and provides an opportunity to improve teaching performance.

References

Andrew, M. D., Cobb, C. D., & Giampietro, P. J. (2005). Verbal ability and teacher effectiveness. *Journal of Teacher Education, 56(4),* 343-354.

Darling-Hammond, L. (2010) .Teacher education and the American future. *Journal of TeacherEducation, 61,* 34-57.

Dymond, S. K., & Bentz, J. L. (2006).Using digital videos to enhance teacher preparation. *Teacher Education and Special Education, 29(2),* 98-112.

Fuller, F., & Manning, B. (1973). Self-confrontation reviewed: A conceptualization for video playback in teacher education. *Review of Educational Research*, *43*, 469-528.

Rickard, A., McAvinia, C., & Quirke-Bolt, N. (2009). The challenge of change: Digital video-analysis and constructivist teaching approaches on a one year pre-service teacher education program in Ireland. *Journal of Technology and Teacher Education*, *17*, 349-367.

U.S. Department of Education. (2009). *Race to the top executive summary.* Retrieved June 6, 2014, from bttp://www2.ed.gov/programs/ racetotbetop/executive-summary.pdf.

Body Image Perception and Body Dissatisfaction Gender Differences

Devona L. Dixon, North Carolina A&T State University,
Keri Esslinger, Western Kentucky University
Wan-Ju Yen, Indiana State University
Amanda Grimes, University of Missouri Kansas City

Abstract

This study investigated differences in males' and females' body image perceptions and body satisfaction. The online body image and body satisfaction survey was completed by 2,066 undergraduate and graduate male and female students enrolled at a mid-south university. Body image and body satisfaction were evaluated and analyzed using the Figure Rating Scale (FRS) and the Body Area Satisfaction Scale (BASS). A between-gender multivariate analysis of variance (MANOVA) was conducted to test the data collected through the two scales, FRS and BASS. Both genders perceive their body image (size and shape) to be overweight and lack of muscle tone. Additionally, gender differences were found regarding satisfaction with specific areas of the body. The data suggest both males and females are satisfied with the overall appearance of their bodies. However, there were still significant differences in men's and women's BASS and BI, suggesting that while they were both satisfied, men were significantly more satisfied.

Introduction

"Body image refers to an individual's thoughts and feelings about their body and physical appearance" (Morgan & Arcelus, 2009, p. 435) and is a part of the psychology and sociology of "appearance". Psychologically or at the individual level, body image is linked to one's feelings toward self, satisfaction with self, and satisfaction with the parts of their body, grouping of body parts, or the whole body (Kaiser, 1997, p. 108). Sociological aspects of body image are linked to cultural standards and one's perceived or desired social acceptance (Kaiser, 1997, p. 108). The subjective perceptions of one's body may be positive or negative and are based on objective physical characteristics and influenced by one's environment (Phillips & de Man, 2010), which includes family, peers, media, and culture (Sheldon, 2010; Swami, 2011). In Western culture, appearance is of the utmost importance and pressure is high to achieve cultural ideals (Sheldon, 2010) predicated on outward physical appearance, shape, weight, and body tone. Low or poor body image has been found in both male and female college students (Watkins, Christie, & Chally, 2008) with females having greater body dissatisfaction. Female undergraduate and graduate students are more likely to have a lower perceived body image than their male counterparts (Paap & Gardner, 2011).

Body satisfaction is the degree to which an individual is comfortable with her or his body (Kaiser, 1997). When body satisfaction is positive an individual feels good about his or her body. However, a poor sense of one's body contributes to dissatisfaction (Reilly, 2012). Overall, "body dissatisfaction is soaring among both women and men and is increasing at a faster rate than ever before" (Sheldon, 2010, p. 290). As a result, men and women are choosing a number of negative and sometimes frequent appearance management behaviors

including excessive exercise and dieting, self-induced vomiting, and plastic surgery (Reilly, 2012). Men with reported body dissatisfaction participated in negative behaviors such as increased use of steroids, and food supplements intake (Barlett et al., 2008), and some developed eating disorders (Barlett et al., 2008; Griffiths, Angus, Murray, Touyz, 2014; McFarland & Petrie, 2012). Dissatisfied with their less than ideal bodies, women often adopted harmful practices to modify their bodies (Frith & Gleeson, 2012) and reported higher levels of body dissatisfaction often choosing more drastic appearance management behaviors leading to weight loss in order to achieve an ideal weight and shape. These behaviors involve chronic dieting (Gingras et al., 2004; Knobloch-Westerwick & Crane, 2012), smoking (Cawley, Markowitz, & Tauras, 2004; Leahey, LaRose, Fava, & Wing, 2011), and eating disorders including anorexia nervosa and bulimia (Mohr, Roder, Zimmermann, Hummel, Negele, & Grabhorn, 2011).

Methods for Countering Dissatisfaction toward Body Image

Fortunately, not all males and females who experience body dissatisfaction or poor body image practice negative appearance management behaviors. Apparel research identifies an alternative approach to improve or modify the body. A common, non-harmful routine appearance management behavior employed by both males and females is to alter appearance with clothing. Rudd and Lennon (2001) studied the social psychological dimension of clothing in terms of body image. The study's conceptual basis was founded on the idea that perception of and level of satisfaction with one's body leads to utilizing clothing as an appearance management behavior to achieve the western aesthetic ideal. They proposed clothing could theoretically be used to emphasize positive body features and to conceal negative body features. Frith and Gleeson's (2004) qualitative study on body image and appearance management of males found that males between the ages of 17-67 used clothing to hide or conceal their bodies to meet cultural ideals of masculinity. The predominately Caucasian male participants reported they deliberately and strategically wore clothing that made them appear taller, slimmer, muscular, and masculine in an effort to meet cultural ideals of masculinity.

In an exploratory study derived from Rudd and Lennon (2001), researchers Chattaraman and Rudd (2004) surveyed undergraduate female students to examine the relationship between physical and psychosocial attributes of the body and their aesthetic attribute preferences in clothing. Chattaraman and Rudd (2006) found that undergraduate female participants with low body image perception and low body satisfaction wore clothing that provided greater coverage of their bodies, and females with high body image perception and high body satisfaction wore clothing that was more revealing. When used properly, the aesthetic attributes of apparel serve as a coping strategy by reducing the discrepancy between perceived appearance and cultural ideals of beauty, which results in improved body image (Rudd & Lennon, 2001).

Factors Affecting Body Dissatisfaction in Males and Females

Body dissatisfaction begins at an early age for both genders. Differences exist in the manner in which males and females perceive their bodies' shape and weight. For body

dissatisfaction, McKinney and Hyde (1996) proposed gender differences could be explained by body shame and body surveillance, which are two components of objectified body consciousness. Boys and girls battle with body satisfaction as early as their pre-teen years. During adolescence, some boys spend a considerable amount of time on their appearance and are pressured to build muscle mass to meet the cultural ideal physique while other boys experience teasing and physical harassment for being thinner or fatter than their counterparts (Hunt-Hurst, 2012). Girls at this age learn that their bodies are objectified and their body consciousness is heightened causing them to express greater shame of their bodies when compared to adolescent boys (Knauss, Paxton, & Alsaker, 2008). Objectification of the body leads to body dissatisfaction (McKinney & Hyde, 1996), which when developed during adolescence may continue into adulthood.

As adults, males are usually less consumed and less critical about their bodies' shape and weight; however, they are becoming more preoccupied with how they look than previously (Sheldon, 2010). Examples of appearance and body preoccupation behaviors include engaging in regular exercise, dieting to maintain or achieve a desired weight, and using toiletries including cosmetics and facial cleansers to improve appearance (Morgan & Arcelus, 2009). Men have been concerned about their appearance for some time, yet western culture traditionally viewed vanity as a feminine characteristic and males thought it to be un-masculine to discuss issues of body shape, weight, and muscle tone (Reilly, 2012). According to Morgan and Arcelus (2009) men's bodies have become more objectified and men are under increasing pressure to conform to an ideal standard, which has led to widespread low body image and body dissatisfaction among younger male adults.
When examining the cognitive and affective dimensions of body image in a random sample of college males based on body mass index (BMI), Watkins, Christie, and Chally (2008) revealed aspects of body dissatisfaction specific to BMI. The researcher found overweight and obese male college students have greater levels of negative body image than normal and underweight males in the study, and underweight college men were more cognitively dissatisfied with their appearances than emotionally concerned about weight and shape. Obese men, particularly, overestimate or distort their body size and are more dissatisfied, while underweight males believe they fail to meet the mesomorphic societal ideal desiring to be more muscular. Underweight, overweight, and obese males in the study had significantly higher levels of body dissatisfaction than that reported by normal weight males. Additionally, "underweight, overweight, and obese men experienced greater weight and shape concerns… suggesting that college men want to achieve 1 of 2 body types – very lean or very big and muscular" (Watkins et al., 2008, p. 98).

"Cultural shifts in the ways men's bodies are represented lead men to feel increasingly dissatisfied with their appearance" (Frithand & Gleeson, 2004, p. 142). Further, the "changing representation of the male body makes men increasingly aware of and dissatisfied with bodies that do not meet this cultural ideal" (Frithand & Gleeson, 2004, p. 142) of a muscular, toned masculine male. Various media formats, such as magazines and television, promote the cultural or societal ideal male body type. Masculine images presented in appearance media result in men's desires to increase muscle or reduce weight (Barlett et al., 2008).

Females are often more consumed with and critical of the shapes of their bodies and their actual weight. For adult females, constant comparison of their bodies to those of professional models portrayed in media leads many women to experience body dissatisfaction. Research supports that after exposure to thin ideal media images females' body dissatisfaction increases (Tiggemann, Slater & Smyth, 2014). When compared to thin female models, women may feel shame and anxiety (Barlett et al., 2008) for not meeting the perceived standard. Women are more prone than men to have a negative body image because they are socialized to be continuously conscious of the thin female body and of being evaluated based on appearance (Barlett et al., 2008) because in western culture thinness equals beauty (Sheldon, 2010). Thus, for both genders the negative feelings and thoughts gained from appearance media contributes to increasingly alarming rates of body dissatisfaction and distorted body images.

This investigation explored differences in males' and females' perceptions of their body images and satisfaction with parts of and the whole body while gaining insights to the body shape and size desired. Males' and females' perceptions of their bodies influence the choices they make regarding their outward appearances. Particularly, perceived body shape guides how one dresses and the clothes, colors, styles, and silhouettes one considers and wears; the type of diet chosen, and how often and the amount and type of exercise or physical activity . This study is important because females are critical when analyzing their bodies and often have a distorted body image (Paap & Gardner, 2011) and low body satisfaction. Males traditionally have not been as critical of their bodies, and typically express acceptance and admiration of their less than perfect bodies. However, recent studies have reported ambivalence and constant renegotiation of body image and body satisfaction (Frith & Gleeson, 2004; Griffths, Angus, Murry & Touyz, 2014; Morgan & Arcelus, 2009) are growing among adult men. Considering females' traditional views and males' growing uncertainty regarding their bodies, an investigation into gender perceptions of body image and body satisfaction is pertinent in understanding societal attitude shifts.

Methodology

Instrument

The Body Areas Satisfaction Scale (BASS), a subscale of the Multidimensional Body Self-Relations Questionnaire (MBSRQ) (Brown, Cash, & Mikulka, 1990; Cash, 2000), was used to assess body satisfaction. BASS is a 9-item, 5-point scale ranging from very dissatisfied (1) to very satisfied (5). BASS taps satisfaction with discrete aspects of one's appearance, with high composite scores indicating general contentment with most areas of an individual's body; low scores indicate being unhappy with the size or appearance of several areas of the bodies (Cash, 2000). It is a widely-used instrument among body image and body satisfaction research. BASS has a Cronbach' alpha value of .77 for males and .73 for females (Brown, Cash, & Mikulka, 1990; Cash, 2000).

The Figure Rating Scale (FRS) is a rating scale displaying 9 silhouettes ranging from very thin (#1) to very obese (#9) (Stunkard, Sorensen, & Schulsinger, 1983). Both male and female silhouettes are shown in the FRS as figure line drawings that serve as a prompt to

measure body image perceptions, including current body size and ideal/desired body size (Mahajan, 2009). Stunkard's FRS is a valid and reliable measure of women's weight status (Cardinal, Kaciroti & Lumeng, 2006). The participants were instructed to select a figural drawing indicating their perceived current size (how they think they look now), and an ideal size (how they would like to look). The difference between the perceived current size ratings and ideal size choices was used as an index of body image satisfaction. A measure for body dissatisfaction has often been identified as a difference between desired body size and current body size (Bulik, Wade, Heath, Martin, Stunkard & Eaves, 2001).

The line drawings of the FRS have been normalized to correspond with BMI. The Center for Disease Control and Prevention (CDC) has established weight categories determined by BMI scores -- underweight equals a BMI under 18.5, normal weight equals 18.5-24.9 BMI, and overweight equals 25-29.9 BMI and a BMI of 30 and above equals obese (CDC, 2014). The research conducted by Bulik et al (2001) normalized the FRS silhouettes to correspond with BMI criteria. The researches collected BMI and silhouette data from slightly over 28,000 Caucasian males and females ages 18-100. To facilitate generalizability, a BMI <20 indicates thinness which is equivalent to silhouettes 1 and 2 for both genders. A BMI >30 indicates obesity which is equivalent to silhouettes 8 and 9 for both genders. For both genders, silhouette 4 of the FRS represents the optimal balance for thinness. For females, silhouette 4 is the model silhouette and is equal to a BMI of 23.1 (+/-2.2) (Bulik et al., 2001), and silhouette 5 is the model silhouette for males, equivalent to a BMI of 25.8 (+/- 2.2) (Bulik et al., 2001). Silhouette 6 of the FRS represents the optimum cut-off for the identification of obesity (Bulik et al., 2001).

Sample

The respondents were 2,066 undergraduate and graduate male and female students enrolled at a mid-south university who completed an online survey consisting of 69 items. The emailed survey received a 10% response rate. The sample consisted of 1,497 females (72.5%) and 569 males (27.5%). The majority (86%) of respondents were Caucasian (see Table 1) with representation from other racial groups. Only four percent (4%) of the sample were student athletes. Individuals that submitted incomplete questionnaires were eliminated from the participant pool.

Table 1. Race/Ethnicity of Participants by Gender

Race/Ethnicity	Male	Female	Total	Total Percentage
African American	35	90	125	6.1
American Indian	1	6	7	.3
Asian or Pacific Islander	22	31	53	2.6
Caucasian	474	1310	1782	86.3
Hispanic	16	24	40	1.9
Other, Please Specify	23	36	59	2.9
TOTAL N	569	1497	2066	100

Data Collection

A 69-question Qualtrics generated online survey was created. The survey link was emailed to all enrolled students at the university. The online survey was available for 14 days in early February 2012. A reminder email was sent after seven days after the first notification to all enrolled students containing the survey link. Only students who completed the entire survey were linked to a second online Qualtrics survey, which asked participants to provide their names and official university email addresses if they wished to be considered for the incentive drawing. All data collected were downloaded from Qualtrics in an Excel and SPSS file and prepared for analysis.

Results

Gender and Size Perception Ratings

A between-gender multivariate analysis of variance (MANOVA) was performed over data collected from the two scales, FRS (for BI) and BASS. The results of the MANOVA for BASS and BI show significant effect on each scale in relation to gender (see Table 2). Wilk's $\lambda = 0.868$, $\eta 2 = .132$, $F(2, 2066) = 157.49$, $p < .05$ (.000). There was also significant difference in each scale concerning how young adult men and women rated themselves on the FRS ($F(1, 2066) = 239.43$; $p < .05$ (.000); $\eta 2 = .104$) and the comparison of men and women on the BASS scale, BASS ($F(1, 2066) = 34.43$; $p < .05$ (.000); $\eta 2 = .016$) (see Table 3).

Table 2. Overall Results of the One-way MANOVA for Gender

Effect	*df*	Wilks Λ	*F*-value	ρ	η^2
Gender	2	0.868	157.496	0.000*	0.132

*$p < .05$

Table 3. One-way MANOVA of BASS and BI: Differences between Genders

Group	Dep Variable	SS	df	F	ρ	η2
Gender	BASS	19.327	1	34.434	.000*	0.016
	BI	139.188	1	239.431	.000*	0.104

*$p < .05$

Table 4. Mean Scores for BASS and BI by Gender

	Gender	N	Mean	Std. Deviation
BASS	Male	569	3.462	.75646
	Female	1497	3.246	.74640
BI	Male	569	6.201	.75400
	Female	1497	5.779	.76563

Both males and females identified silhouette #6 (overweight) as the scale silhouette most closely representing their current perceived body image. For their ideal body image, both males and females selected silhouette #4 (normal weight). The scale figures reflect the participants' perceived body size, shape, and weight. When comparing the selected

silhouettes to the Bulik et al., (2001) normalized ratings, silhouette #4 represents the optimal thinness and silhouette #6 represents the optimal cut-off to obesity with silhouettes 8 and 9 representing obesity.

Gender and Body Dissatisfaction

Overall, a higher percentage of male participants indicated satisfaction with their bodies compared to female participants, 67% to 58% respectively. A summary of the overall body areas of satisfaction and dissatisfaction percentages of males and females are shown in Table 5. Seventy-five percent (75%) of males participants compared to 74% of females participants found satisfaction with the face (facial features, complexion) as part of the body. Sixty percent (60%) of males in the study were satisfied with their lower torso (buttocks, hips, thighs, and legs) while 39% of females were satisfied with this area of their bodies. Both genders reported dissatisfaction with their mid torso (waist and stomach), 35% of males and 30% of female participants. Males and females in the study reported satisfaction with the upper torso (chest or breast, shoulders and arms). Half of males (50%) and slightly over half (54%) of females were satisfied with their upper torso area. Weight is an aspect of the body where male and female's opinions of satisfaction diverged. Forty-nine percent (49%) of male participants were satisfied with their weight and 32% of female participants were satisfied with their weight. Both genders were satisfied with their muscle tone, 46% of males and 31% of females. Concerning overall appearance, males (67%) and females (58%) were satisfied. (See Table 5)

Table 5. Satisfaction with 6 Body Areas and Overall Appearance of Males (n = 569) and Females (n = 1497)

BODY AREA	Males		Females
	Satisfaction %	BODY AREA	Satisfaction%
Face (facial features, complexion)	75	Face (facial features, complexion)	74
Lower Torso (buttocks, hips, thighs, legs)	60	Upper Torso (chest or breast, shoulders, arms)	54
Upper Torso (chest or breast, shoulders, arms)	50	Lower Torso (buttocks, hips, thighs, legs)	39
Weight	49	Weight	32
Muscle Tone	46	Muscle Tone	31
Mid Torso (waist, stomach)	35	Mid Torso (waist, stomach)	30
Overall Appearance	67	Overall Appearance	58

Overall, the data suggests male participants were more satisfied with particular areas of the body -- the lower torso, upper torso, weight, and muscle tone than females and while female participants reported more dissatisfaction with the lower torso, mid torso, weight, and muscle tones aspects of their bodies. Both genders were satisfied with their face, upper torso, and overall appearance. Both male and females were dissatisfied with their mid torso. Despite similarities, overall the data suggest males are significantly more satisfied with their body than females.

Discussion

The findings of the present investigation indicate significant differences in males' and females' perception of body image. These differences are notable even with both genders perceiving their body image (size and shape) to be overweight and without muscle (silhouette #6 on the FRS), which reflects the cut-off to obesity as normalized by Bulik et al. (2001). Both genders desire an optimal thin figure (silhouette #4 on the FRS).

Traditionally, American culture has been obsessed with thinness through which society defines its ideals of beauty, including body weight and shape. Silhouettes 1, 2, and 3 were rarely chosen as an ideal or actual body image for males or females in this study. Those silhouettes represent thinness and BMI <20 (Bulik et al., 2001). Silhouette #4 represents a normal weight for both genders (Bulik et al., 2001). A shift in the cultural standards of the extremely thin female models or muscular male models that dominate media imagery to a normal healthy body size, shape and weight is underway. The selection of silhouette #4 may suggest a changing cultural ideal body size and shape from thin to normal or average body weight and shape which may be viewed by young adults as attractive and healthier for both males and females.

The desire to be optimal thin supports the cultural desires of a thin body image. Research suggests that young adults are under tremendous pressure to achieve the cultural ideals (Sheldon, 2010) of a thin body. The pressure likely has a negative effect on perceptions of the physical body and could lead to negative attitudes and behaviors such as low self-esteem, a distorted body image, and low body satisfaction (Reily, 2010) and to eating disorders and risky behaviors. The concept of body image includes objective physical attributes that are positively or negatively interpreted resulting in a highly subjective body image greatly influenced by one's environment (Phillips & deMan, 2010). A college campus is an influential environment for young adults. According to Sira and Parker White (2010) "for college students, this developmental period is associated with social and peer pressures to fit a societal picture and conform to the cultural ideal" (p. 508). Therefore, the suggested changes in cultural ideals among these young adults of this study may foster a more positive and healthy environment during these formative years.

Silhouette #6 represents an overweight body image. Identifying silhouette #6 as the sample's current body image and expressing an overall satisfaction with their body suggest that males and females support a larger body weight, size and shape. Adults who are overweight (including obese) represent a significant portion of the United States population. According to Schoenborn, Adams and Peregoy (2013), 6 of 10 adults are overweight (including obese)

and America continues to struggle with the obesity epidemic. The high prevalence of overweight and obese adults creates a perception of normality. As a result, overweight individuals may have overall body satisfaction and a positive body image. According to Kaiser (1997) body image may be linked to cultural influences with personal and cognitive perceptions. The United States has a cultural weight problem, yet each individual must decide how he or she will view their perceived body image.

This study sought to determine gender differences in perceived body satisfaction. Females and males reported dissatisfaction with specific parts of the body, but not the same parts or regions of the body. Although females were dissatisfied with specific parts of the body, 58% expressed satisfaction with their overall appearance. Females were dissatisfied with their lower torso (buttocks, hips, thighs, and legs), mid torso (waist and stomach), weight, and muscle tone, yet were satisfied with their overall appearance and face. The findings from this study are consistent with Chattaraman and Rudd's (2006) of an all-female college-student population. They identified the specific body part for which the participants were most dissatisfied, which were the thighs (low torso), waist (mid torso), and weight.

Females' dissatisfaction with specific areas of the body and satisfaction with overall appearance can be explained by the self-objectification theory. Self-objectification theory suggests that females are socialized in western culture to internalize others' opinions about their own bodies, which results in an unhealthy preoccupation with physical appearance (Morry & Staska, 2001). Self-objectification theory "predicts that women experience the negative consequences of self-objectification predominantly as a result of whether they feel satisfied or dissatisfied with their bodies" (Morry & Staska, 2001, p. 272). In western cultures, such as the United States, the female body is socially constructed to be viewed as an object (Tiggeman & Lynch, 2001) by individuals and others. Females learn that their bodies are objectified and therefore their body consciousness is heightened resulting in body dissatisfaction. For women, body dissatisfaction is evident through continuous self-objectification, habitual body monitoring, appearance anxiety, and disordered eating (Tiggerman & Lynch, 2001).

Both genders experience body dissatisfaction but along different shape dimensions (Vartanian, Giant & Passino, 2001). Males were more satisfied with their body (parts and whole). The area of great dissatisfaction by the highest percentage of males in this study was the mid torso (waist, stomach) unlike the findings of Morgan and Arcelus (2009) where it was reported that males' have dissatisfaction with their upper torso (chest or breast, shoulders, arms). Males in the current study were satisfied with their upper torso, overall appearance, and face. Jonason, Krcmar and Sohn (2009) postulated the actual size of men's bodies have a limited effect on their body satisfaction; whereas Morgan and Arcelus (2009), believe lesser cultural pressures are imposed on males to meet the ideal cultural standards. However, the muscular body is the idealized standard for males. Thus, ideal masculine images presented in media create negative feelings and thoughts leading to some males' desires to gain muscle and reduce weight (Barlett et al., 2008) in an effort to obtain the ideal body and achieve greater body satisfaction.

In conclusion, males and females were overall satisfied with their appearance, while having dissatisfaction with parts of their bodies. The data also suggests a cultural ideal shift may be taking place regarding body image. After years of the media idealizing extremely thin women or overly muscular men, it seems as though a "normal healthy body weight" is being desired more often than the more unrealistic thin or muscular body type. More research should be performed to confirm this shift in cultural ideals that may have a positive impact on body image for young adults in the United States.

Disclosure Statement

The authors declare that there are no conflicts of interest.

References

Aubrey, J. S., & Taylor, L. (2009). The role of lad magazines in priming men's chronic and temporary appearance-related schemata: An investigation of longitudinal and experimental findings. *Human Communication Research*, 35, 28-58. doi: 10.1111/j.1468-2958.2008.01337.x

Barlett, C. P., Vowels, C. L., & Saucier (2008). Meta-analysis of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology*, 27(3), 279-310.

Brown, T.A., Cash, T.F., Mikulka, P.J. (1990). Attitudinal body image assessment: Factor analysis of the Body-Self Relations Questionnaire. *Journal of Personality Assessment*, 55, 135-144.

Bulik, C.M., Wade, T.D., Heath, A.C., Martin, N.G., Stunkard, A.J, & Eaves, L.J. (2001). Relating body mass index to figural stimuli: Population-based normative data for Caucasians. *International Journal of Obesity*, 25, 1517-1524.

Cash, T. F. (2000, January). The Multidimensional body-self relations questionnaire. In *MBSRQ Users' Manual* (3rd ed.). Norfolk, VA: Old Dominion University

Chattaraman, V., & Rudd, N. A. (2006). Preferences for aesthetic attributes in clothing as a function of body image, body cathexis and body size. *Clothing and Textiles Research Journal*, 24(1), 46-61.

Cardinal T., Kaciroti, N. & Lumeng, J. (2006, December). The figure rating scale as an index of weight status of women on videotape. *Obesity*, 14(12), 2132-2135.

Cawley, J., Markowitz, S., Taurus, J. (2004). Lighting up and slimming down: The effects of body weight and cigarette prices on adolescent smoking initiation. *Journal of Health Economics*, 23, 293–311.

Center for Disease Control and Prevention. (2014). Interpretation of BMI for adults. Retrieved from http://www.cdc.gov/healthyweight.

Frith, H. & Gleeson,K. (2004). Clothing and embodiment: Men managing body image and appearance. *Psychology of Men and Masculinity*, 5, 40-48.

Gingras, J., Fitzpatrick, J., & McCargar, L. (2004). Body image of chronic Dieters: Lowered appearance evaluation and body satisfaction. *Journal of the American Dietetic Association*, *104*(10), 1589-1592.

Griffiths, S., Angus, D., Murray, S., & Touyz, S. (2014, January). Unique associations between young adult men's emotional functioning and their body dissatisfaction and

disordered eating. *Body Image*, *11*(1), 175-178. Retrieved from http://dx.doi.org/10.1016/j.bbr.2011.03.031.

Kaiser, S.B. (1997). The social psychology of clothing: Symbolic appearances in context (2nd ed. Revised). New York, NY: Fairchild Publications.

Knauss, C., Paxton, S. J., & Alsaker, F. D. (2008). Body dissatisfaction in adolescent boys and girls: Objectified body consciousness, internalization of the media body ideal and perceived pressure from media. *Sex Roles*, 59, 633-643. doi: 10.10007/s11199-008-9474-7

Knolboch-Westerwick, S. & Crane, J. (2012). A losing battle: Effects of prolonged Exposure to thin-ideal images on dieting and body satisfaction. *Communication Research*, 39(1), 79-102.

Leahey, T. M., LaRose, J. G., Fava, J. L. & Wing, R. R. (2011). Social influences are associated with BMI and weight loss intentions in young adults. *Obesity*, 19, 1157–1162. doi: 10.1038/oby.2010.301

Mahajan, A. Y. (2009, May 9). Comparing self and other's perceptions of adolescent girls body size using figural stimuli and 3D body scans. (Masters Thesis, Auburn University). Retrieved from http://etd.auburn.edu/etd/bitstream/handle/10415/1586/Mahajan_Aarti_33.pdf?sequence=1

McKinney, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale: Development and validation. *Psychology of Women Quarterly*, *20*, 181-215.

McFarland, M. & Trent, A. (2012). Male body satisfaction: Factorial and construct validity of the body parts satisfaction scale for men. *Journal of Counseling Psychology*, *59*(2), 329-337.

Mohr, H.M., Roder, C., Zimmermann, J., Hummel, D., Negele, A., Grabhorn, R. (2011). Body image distortions in bulimia nervosa: Investigation body size overestimation and body size satisfaction by fMRI. *NeuroImage*, *56*(3), 1822-1831.

Morry, M. M., & Staska, S.L. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science*, *33*(4), 269-279.

Morgan, J. F., & Arcelus, J. (2009). Body image in gay and straight men: A qualitative study. *European Eating Disorders Review*, 435-443. Retrieved from 10.1002/erv.955

Paap, C. E., & Gardner, R. M. (2011). Body image disturbance and relationship satisfaction among college students. *Personality and Individual Differences*, *51*(6), 715-719.

Phillips, N., & de Man, A. F. (2010). Weight status and body image satisfaction in adult men and women. *North American Journal of Psychology*, *12*(1), 171-184.

Reilly, A. (2012). The Body. In K. Miller-Spillman, A. Reilly & P. Hunt-Hurst (Eds.), *The Meaning of Dress* (3rd ed., pp. 129-141). New York, NY: Fairchild Books.

Schoenborn C.A., Adams, P.F., & Peregoy, J.A. (2013). Health behaviors of adults: United States, 2008–2010. *National Center for Health Statistics*. Vital Health Stat 10(257).

Sheldon, P. (2010). Pressure to be perfect: Influences on college students' body esteem. *Southern Communications Journal*, *75*(3), 277-298.

Stunkard, A. J., Sorensen, T. I., & Schulsinger, F. (Eds.) (1983). *Use of the Danish adoption register for the study of obesity and thinness*, New York, NY: Raven Press.

Swami, V., Taylor, R., & Carvalho, C. (2011). Body dissatisfaction assessed by the Photographic Figure Rating Scale is associated with sociocultural, personality, and media influences. *Scandinavian Journal of Psychology*, 52, 57-63.

Tiggemann, M. & Lynch, J. (2001). Body image across the life span in adult women: The role of self-objectification. *Developmental Psychology*, 37(2), 243-253.

Tiggemann, M., Slater, A., & Smyth, V. (2014). 'Retouch free': The effect of labelling media images as not digitally altered on women's body dissatisfaction. *Body Image*, *11*(1), 85-88.

Vartanian, L., Giant, C. & Passino, R. (2001). "Ally McBeal vs. Arnold Schwarzenegger": Comparing mass media, interpersonal feedback and gender as predictors of satisfaction with body thinness and muscularity. *Social Behavior and Personality*, 29, 711-723.

Watkins, J. A., Christie, C., & Chally, P. (2008). Relationship between body image and body mass index in college men. *Journal of American College Health*, *57*(1), 95-99.

KAHPERD
Kentucky Association for
Health, Physical Education, Recreation and Dance