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### **Validity of a Self-Administered 3-Day Physical Activity Recall in Young Adults**

**Jennifer L. Han and Mary K. Dinger**

**Background:** Most physical activity recall questionnaires assess activity over a 7-day period. However, questionnaires have been validated in adolescents and adults using shorter recall timeframes. **Purpose:** The purpose of this study was to assess the validity of a self-administered 3-day physical activity recall instrument (3DR) in young adults. **Methods:** Thirty-nine participants (age:  $21.0 \pm 2.2$  years; body mass index:  $23.3 \pm 3.3$  kg/m<sup>2</sup>) wore an accelerometer during all waking hours for seven consecutive days and completed the 3DR on the eighth day. **Results:** During the 3-day recall period, participants accumulated  $283,488.1 \pm 86,792.3$  counts/day,  $347.0 \pm 102.5$  counts/minute, and reported spending 23.3 (IQR = 35.0) and 11.7 (IQR = 43.3) minutes in moderate and vigorous intensity activity, respectively. Counts/day and counts/minute correlated with self-reported minutes of vigorous activity ( $r_s=0.40$ ,  $p=0.01$  for both variables). **Discussion:** Results indicate that the validity indices of the vigorous 3DR items are similar to other self-report physical activity questionnaires. **Translation to Health Education Practice:** Health education and promotion professionals should consider using the 3DR when evaluating physical activity interventions in college students and young adults.

### **Predictors of Quality of Life, Sexual Intercourse, and Sexual Satisfaction among Active Older Adults**

**Tina M. Penhollow, Michael Young, and George Denny**

**Background:** Relatively little is known about the sexual behaviors of older people, and the relationship between quality of life and sexuality has not been fully explored. **Purpose:** The purpose of this study was to investigate the impact of sociological, cultural, and psychological factors to further explain variance beyond biological changes that influence participation in sexual intercourse, sexual satisfaction, and overall quality of life. **Methods:** Data were collected using a mixed-mode approach to optimize participant response and coverage. Residents of a large active retirement community served as the study participants. **Results:** Logistic regression identified a set of biopsychosocial variables which significantly distinguished between those who participate and do not participate in sexual intercourse. Multiple regression procedures identified sets of variables that significantly predicted sexual satisfaction and quality of life. **Discussion:** Overall findings add to the existing body of literature on aging, sexual health, and quality of life. **Translation to Health Education Practice:** Health professionals should develop interventions that provide education about sexuality to enhance sexual satisfaction and quality of life among community dwelling older adults.

### **A Comparison of an Individually Tailored and a Standardized Asthma Self-Management Education**

**Judy Shackelford and Jean H. Bachman**

**Background:** Asthma is one of the most prevalent chronic diseases in the United States and can be life-threatening. There are a rising number of adults with asthma that cannot be prevented or cured but may be controlled. Self-management education is essential for

long-term asthma control; however, the most effective type of education is unknown. Purpose: The study examined and compared effects of an individually tailored (n = 44) and a standardized (n = 44) asthma self-management program on adult asthma control. The individually tailored education utilized an andragogical framework. Methods: A comparative, pretest-posttest design was used. Education curricula were based on National Asthma Education Prevention Program guidelines. Asthma Control Test (ACT) and Peak Expiratory Flow readings were pre and post-test measures. Independent t-test, chi-square, and repeated measure general linear model compared groups. Results: A significant difference in ACT scores between pre and post-test ( $F = 4.43$ ,  $p = 0.038$ ) and a decrease in mean number episodes of shortness of breath ( $F = 6.22$ ,  $p = 0.015$ ), regardless of asthma teaching method was found. Over 50% of participants reported not receiving previous asthma education. Physicians were the primary source of education reported. Discussion: Asthma education is needed. Both the standardized and individually tailored education may improve asthma control. Translation to Health Education Practice: Health educators must take an active role in providing asthma education based on the rising number of adults with asthma and reports of those receiving no education. Practitioners can determine the type of education based on the setting and learner needs.

### **Children's Physical Fitness and Academic Performance**

**Richard A. Wittberg, Karen L. Northrup, and Lesley Cottrel**

Background: Childhood obesity is a major public health threat. Increased fitness may have a positive influence on cognitive performance in both adults and children. Purpose: To examine which aspects of children's fitness assessment are associated with their performance on four different academic areas. Methods: FITNESSGRAM measures aerobic capacity, abdominal strength, upper body strength/endurance, flexibility, and trunk lift. Gender and a socio-economic status proxy were compared with mean group performance scores across four subscales: mathematics, reading/language arts, science, and social studies of a statewide standardized academic performance test on a sample of 968 5th grade students (50.7% male; mean age = 10.6 years). Results: Achievement test scores were significantly better for children who were in the Healthy Fitness Zone (HFZ) for aerobic capacity and abdominal strength tests when compared to children who were unable to achieve the healthy zone. Children in the HFZ for upper body strength performed significantly better in math. Children in the HFZ for flexibility performed significantly better in math and science. No differences were found in academic performance when children in the HFZ for trunk lift were compared to children not in the healthy zone. When all FITNESSGRAM measures were used in a full factorial ANOVA with Body Mass Index (BMI), gender and meal program (a proxy variable for socioeconomic status) as covariates, aerobic capacity was found to be the only fitness variable consistently appearing as important. It was always significant as a main effect variable while no other main effect fitness variable achieved significance for any WESTEST subject. Two-way, three-way, and four-way interactions always included aerobic fitness and no other fitness measure was universal in these interactions. Discussion: Whereas, aerobic fitness appears universally important in academic success, additional mechanisms may be at work due to the several interactions that achieved significance. The interactions may be an indication of the importance of overall fitness in addition to aerobic fitness. These findings support the development and implementation

of childhood cardiovascular risk surveillance programs that not only evaluate children's overweight risks but also their fitness. Translation to Health Education Practice: Increased focus on ways to improve children's fitness levels may create the need to reevaluate current policy recommendations for children's physical education.

### **Comparison of Body Mass Index (BMI) Categories Based on Asian and Universal Standards and Language Spoken at Home among Asian American University Students**

**Tiffany Ng, Shari McMahan, Michele Mouttapa, Sora Park Tanjasiri, and William Beam**

**Background:** The World Health Organization released lower Body Mass Index (BMI) cutoff points for Asian individuals to account for increased body fat percentage (BF%) and risk of obesity-related conditions at a lower body mass index. **Purpose:** This preliminary study: (1) explores the impact of utilizing Asian BMI standards (compared to universal standards) on the overweight/obese categorization of Asian females and males; and (2) determines whether age, gender, acculturation, and living arrangements are associated with BMI and BF%. **Methods:** Data on demographic variables, height and weight, BF%, living situation, and language spoken at home were collected from 170 Asian students enrolled in a health course at a public university in California. **Results:** When Asian BMI cutoffs were applied, categorization of Asian males and females as normal weight decreased significantly. Language spoken at home was not significantly associated with BMI; however, acculturated females tended to have higher BMIs than non-acculturated females, while acculturated males tended to have lower BMIs than non-acculturated males. **Discussion:** Utilization of Asian-specific BMI cutoffs will significantly increase the reported prevalence of overweight and obesity among Asians. Acculturation to the United States may be a risk factor for overweight/obesity especially among Asian females. **Translation to Health Education Practice:** Asian-specific BMI cutoffs may be appropriate in clinical settings, given that overweight-obesity related conditions occur at relatively lower rates of BMI and BF% among Asians.

### **A Comparative Review of the Effectiveness Trial of N-O-T in Alabama: Guideposts for Future Research**

**Kimberly Horn and Geri Dino**

The American Lung Association's Not On Tobacco (N-O-T) program is federally recognized as an accessible and effective option for teen smoking cessation. The program is the most widely used teen smoking cessation program in schools and communities across the U.S. Over a decade of research demonstrates the program's solid evidence base, with overwhelmingly positive findings for both smoking cessation and reduction. A recent publication detailing a Not On Tobacco trial in Alabama reported low impact and negative findings. Given the program's widespread use across the country, it is important to understand differential outcomes between the Alabama study and past Not On Tobacco studies, and to explore what we can learn from these differences. The current manuscript: (1) details and compares the methodological differences between the Alabama study and previous Not On Tobacco efficacy and effectiveness studies in other states, (2) explores

important issues surrounding the analysis of teen smoking cessation outcomes, and (3) provides guidance for future research for Not On Tobacco and other teen smoking cessation interventions.

**Emphasizing Sustainable Health and Wellness in a Health Education Curriculum**  
**Srijana M. Bajracharya**

Environmental sustainability is the most visible recent global movement addressing the effect of human activities on the environment. Because of its effect on human health and well-being, it is imperative that the health education discipline begin to consider this topic as one of the important content areas. This paper provides a model for the integration of environmental sustainability concept into a traditional health education course that equips students with the basic competencies of planning, implementing, and coordinating health education programs. The main purpose is to describe how to reach a maximum number of people and educate them regarding this important issue by using service-learning and advocating for sustainable health and wellness through a health education course.