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Gender Differences: Exercise Beliefs Among Youth

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Gender Differences

Exercise Beliefs Among Youth

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Ann Arbor, Michigan—Despite conclusive evidence that exercise improves health and decreases the risk of coronary heart disease, only 12 percent of the U.S. population age 18 or older report levels of physical activity that promote cardiorespiratory fitness. Physical activity declines almost 50 percent during adolescence, with females becoming increasingly more sedentary than males.



DR. PENDER

After puberty, girls have greater fat mass and less muscle mass than boys. These biological differences may, in part, account for some of the gender and developmental variation in physical activity, but social and environmental influences may be equally or more important.

For example, more active parents have more active children, indicating the importance of positive parental role models. Ease of access to exercise facilities is related to the level of physical activity in adults and also may affect exercise patterns of youth.

Sedentary patterns developed in youth may persist over time, resulting in premature physical deterioration. Coronary heart disease, for which sedentary lifestyle is a risk factor, is a life-long pathologic process that originates during childhood and adolescence. Harshfield et al found that less-fit African-American adolescent males and females had higher systolic and diastolic pressures than more-fit African-American females. Danforth et al reported that following a 12-week aerobic exercise program, the diastolic and systolic blood pressures of low-socioeconomic African-American children decreased significantly.

Further, exercise seems to lower cholesterol

and maintain recommended weight, particularly in combination with dietary changes. Exercise also has been shown to have positive effects on motor skills, depressive symptoms, self-concept, and self-esteem among youth.

Based on the increasing evidence that links active lifestyles to health, two objectives in Healthy People 2000 seek to increase physical activity among youth, and to augment the proportion of primary care providers who counsel routinely their young patients regarding physical exercise. For effective counseling, exercise-related beliefs and determinants of exercise participation among youth must be considered.

The purpose of this study, supported by a grant from the National Institute of Nursing Research, was twofold: to identify differences in the exercise-related beliefs and exercise behaviors of male and female pre-adolescents and adolescents, and to determine the relationship between a person's background, relevant beliefs, and exercise behaviors.

During the 1992-1993 academic year, two groups of children in racially diverse school districts were recruited: one in fifth or sixth grades, and one in eighth grade. Of the 399 participants, 286 (72 percent) provided complete data for the study. This sample consisted of 51.7 percent females and 48.3 percent males with a racial distribution of 30.4 percent African-Americans, 62.6 percent European-Americans, and 7 percent of other racial heritage.

Thirteen different tools and measures, including several new instruments, were used to assess items such as exercise levels, self-esteem, self-efficacy, barriers, social support for exercise and family norms.

Key Findings

The study findings highlight girls as a high-risk group for inactivity and suggest that benefits and

barriers to exercising are critical factors to consider in developing interventions. Other important findings include:

- Pre-adolescent and adolescent girls reported poorer perceived health status than pre-adolescent and adolescent boys.
- Pre-adolescent and adolescent girls had lower self-esteem than the boys at both stages.
- Girls were less likely than boys to think of themselves as exercisers.
- Adolescent girls were less likely than their pre-adolescent counterparts to believe that the benefits of exercise outweighed the barriers to exercise.
- Older boys were more likely to believe the benefits of exercise outweighed the barriers than their younger counterparts.
- There was a trend for older boys to rate themselves about the same or slightly more capable than younger boys in regard to exercise, and older girls to rate themselves less capable than younger girls in regard to exercise.
- Race was predictive of access to exercise facilities, such as parks, playgrounds, indoor gyms and programs. African-American youth reported greater access to exercise facilities and programs than European-Americans, indicating that the former may be more resourceful in perceiving various sites as appropriate for physical activity.

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Nursing student Ruby Nzoma works out at the University of Michigan School of Nursing's fitness laboratory.

• Girls' perceptions of poorer health status than boys may be an early barrier to exercising.

Studies of the relationship between social support for exercise and physical activity indicate that adolescents receive less support from their families for sustained involvement in leisure-time physical activity than pre-adolescents. Exposure to role models that are physically active, that set norms for exercise, and that provide emotional

and instrumental support to be active may be an effective strategy for encouraging increased exercise among both females and males throughout childhood and adolescence.

Important clues emerged in understanding why adolescent females are more sedentary than adolescent males. For example, girls, in contrast to boys, were less likely to describe themselves as athletic, and it may be an area that has little

personal significance to them as an aspect of who they are—of self. A girl's ability to think of herself as athletic may need to be augmented in early childhood to promote active lifestyles that continue into adulthood. Further, low self-esteem may contribute to the lack of motivation to engage in self-enhancing behaviors such as exercise. ■

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Building an Exercise Identity

By **Keri K. Medina**, RN, DNSc, Loma Linda University School of Nursing

Research supported by a grant from Sigma Theta Tau International

Loma Linda, California—Health promotion efforts are receiving increased attention in the United States, in an attempt to prevent many chronic conditions. The 1990 government document, "Health People 2000," identified increased physical exercise as a factor that will play a key role in increasing the span of life.

Many potential influences on exercise behavior have been studied in an attempt to identify key targets for intervention, but with largely inconsistent results. Thus, helping people to incorporate exercise into their lives has remained a major nursing challenge.

Drop out rates from both supervised and unsupervised exercise, however, remain high (Dishman, 1991; Salis et al, 1990). In order to develop a clearer understanding of how nonexercisers become exercisers, I studied 22 individuals, 13 males and 9 females, who had successfully made the transition to becoming exercisers at some point in their adult lives.

They ranged in age from 26 to 71 years, although the majority were in their thirties, forties and fifties. The study included people who were of Caucasian, Asian, Hispanic and Native American backgrounds.

Findings from this study indicated that the



Getting a jump start on fitness: Chi Chu, 8, of Lynnfield, Mass., yawns near the end of an aerobics workout in Boston at the 4th Annual Great Massachusetts Workout sponsored by the Governor's Committee on Physical Fitness and Sports in 1996. He and Tino Cohee of Lynnfield, rear, were among a group of classmates from Huckleberry Hill School who won Governor's Fitness Awards.