The Affects of Physical Activity throughout the Life Span

Leticia Suarez & Sofia Warren

Ferris State University
Abstract

Staying active contributes too many facets of our lives. Physically an active individual can appear ten years younger. Mentally, areas such as memory, reasoning and motor control are increased and balanced. Hidden benefits of exercise would be slowing down the aging process and boosting the immune system as a result decreasing the occurrence of chronic disease. This anti-aging effect contributes to an individual’s longevity. The mind is a very powerful contributor to obtaining and setting goals. The sense of believing one can accomplish anything; self-efficacy is a powerful concept giving us the energy to implement our plans. Obesity has reached an epidemic proportion in the U.S., illness and disease is the result. It is vital to identify the need for change and embrace it. Research on physical activity continues to evolve. These articles include both well-established findings. Interest has been developing in ways to differentiate between the various characteristics of physical activity that improve health.
The Affects of Physical Activity

Active adults can work harder than their sedentary counterparts can. Studies suggest that being active can make you feel ten years younger. Researchers at the USDA Human Nutrition Research Center on Aging (HNRCA) have proven there is a good reason active people claim to feel younger. When evaluated through a variety of health and fitness tests, bodies of active adults appear to be younger physically than do the bodies of their couch potato peers. Staying fit also benefits brainpower. A study reported in February 2003 issue of the Journal of Gerontology found three areas of the brain (memory, reasoning, and motor control) that are adversely affected by aging, but are found to stay in better shape when a person keeps their body physically fit. Long-term fitness may help keep our minds sharp as well as our bodies toned. Regular activity slows the aging process. The aging process is not age specific at all. We are all growing older, but what makes the body decline is not so much the passing of years as it is the combined and cumulative effects of inactivity, poor nutrition, and other harmful health habits. The HNRCA researchers identified ten key factors associated with aging. These termed biomarkers are controllable, regardless of one’s current age or physical condition, if you become active (HNRCA, 2005, p.1). According to HNRCA, even clients well past middle age, who have been inactive for many years, can regain lost muscle, lose fat and restore strength. Biomarkers of aging that can be controlled included: lean body mass, strength, resting metabolic rate, body fat percentage, aerobic capacity, blood pressure, insulin sensitivity, cholesterol, bone density and regulation of body temperature (HNRCA, p.1). A twenty-minute walk will lower your blood pressure and clear excess sugar, fat, cholesterol, and stress chemicals from your bloodstream(HNRCA, p.1). These benefits will last for the next 24 to 36 hours (HNRCA, p.1).
Hidden Benefits of Exercise

Regular exercise is thought to help boost the immune system, helping to fight off cold and flu and quite possibly reducing the risk of chronic disease and cancer (Landro, p.1). According to Landro’s article another possible benefit is the slowing down of the aging process. Cited in the article, The Hidden Benefits of Exercise written by Laura Landro is a study being conducted by German researchers, in which they identified that there seemed to be less erosion of the telomeres of chromosomes of athletes. Therefore the researchers concluded that exercise has an anti-aging effect at the cellular level (Landro, p.3). Researchers are looking at whether exercise lengthens the telomeres, as telomeres can no longer divide when they become too short, this process is associated with cancer, aging and a higher risk of death (Landro, p.3). The article goes on to suggest that exercise could then prevent aging of the cardiovascular system.

Landor’s article also cites a study done by David Neiman, director of Appalachian State University’s Human performance lab in which he conducted several randomized studies which showed that people who walked 45 minutes a day, five days a week over 12-15 weeks had fewer cold’s and flu’s; these subjects also had 25% to 50% fewer sick day compared to the sedentary control subjects. “Medical experts say that inactivity poses as great a health risk as smoking, contributing to heart disease, diabetes, hypertension, cancer, depression, arthritis and osteoporosis” (Landro, p. 2). Lean men and women who are inactive are at greater risk for disease and death.
Building Confidence

Self-efficacy means having a sense of control over one’s actions. This sense of control helps you to better deal with troublesome situations. Your level of confidence in your ability to perform a given task is strongly related to actually being able to perform the task or handle the situation (Pender, 2006, p. 212). If you think, you can do it, and then you can. Self-efficacy beliefs have shown to be better predictors of future behaviors than past performance. In relation to weight management, you must think and feel that you have the ability to adopt positive habits to change your lifestyle (Novartis, p.1). A high level of self-efficacy is a very strong predictor of adherence to physical activity and appropriate eating habits, and long term success in weight management. Relinquishing control of your behavior undermines the feelings of self-efficacy necessary to manage your weight.

Children and Activity

In news release dated September 14, 2010, Kathleen Sebelius U.S. Department of Health and Human Services Secretary states, “Ending obesity is critical to children’s health and to their health as adults. Nearly one in three American kids is overweight or obese, which puts them at greater risk of diabetes, heart disease and cancer.” According to the American Heart Association, children in the United States are less physically fit than a generation ago. Inactive children are not likely to have a stroke or heart attack, but the process leading to these conditions is shown to begin in childhood; such as higher blood pressure, increased weight and lower levels of HDL cholesterol (AHA). Furthermore, the AHA states that inactive children become inactive adults. The AHA recommends that children and adolescents participate in at least 60 minutes of moderate to vigorous activity daily. Participation in physical activity can be promoted by
making it fun, making it a family activity and by reducing the sedentary detractors; such as television, video and computer games (AHA). Physical activity helps reduce the risk factors of disease as well as promoting psychological well-being.

**Women and Activity**

In a study conducted at Harvard University, *Women’s Health Study*, conducted over 13 years, found that middle aged women, who participated in at least 60 minutes of moderate intensity activity, consumed a normal diet and a normal BMI where able to maintain their weight over time. Furthermore the study goes on to say that 30 minutes of moderate-intensity of physical activity does not prevent weight-gain overtime without restricting caloric intake, but this group lowered their risk of developing chronic disease. Interestingly the *Women’s Health Study* found that among overweight women, in this study, physical activity was not related to weight change whereas caloric intake was. A caveat to this information is that the first group started with a normal BMI, meaning a BMI less than 25.

**Physical Activity and the Older Adult**

It is never too late to get active. According to the U.S. Department of Health and Human Services, “Few factors contribute as much too successful aging as having a physically active lifestyle”, meaning physical activity can improve function and maintain independence despite health problems in later adulthood. Other than the lower risk of chronic disease, cancer and overall mortality, physical activity is thought to help prevent bone loss and fracture after menopause and improve sleep (HHS). HHS recommends at least 30 minutes of moderate activity 5 or more days a week for older adults, also recommended is strength training to improve endurance and maintain muscle strength. There are many barriers to older adults...
maintaining physical activity. Clinicians, individuals and communities can work together to overcome these barriers; barriers such as physical limitations, access (HHS).

**Resisting Change**

It has been said that the only constant in life, is change. If this is so, then why do so many people fear, dread and resist change? Some individuals feel anxious, excited or frightened by the prospect of change that will be endured as an unpleasant situation because it is familiar and predictable. Reaching for any goal requires change. It is natural that while working toward even the most positive goals, you may feel ambivalent. You may desire (approach) and resist (avoid) the same goal (Novartis, p.23). Even with the most highly valued goals, there is a price to pay. Conversely, even when you are unhappy with your current situation and wish to change it, there is frequently some positive aspect associated with it that is hard to let go. Letting go can be a very painful process. This presents a double approach-avoidance conflict (Novartis p.26). At the same time, you may desire (approach) and resist (avoid) your current situation and your new goal to change or improve the situation (Novartis, p.26). When you are facing a change in your life, whether you choose it yourself or it is externally imposed on you, you can respond in two different ways; you can resist the change, which involves focusing on the negative aspects of the situation and closing your mind to the potential aspects of the change or you can drag your feet against the force of change, which will probably render you frustrated, helpless and hopeless (Novartis, p. 26). Conversely, you can actively embrace the change, which implies opening your mind to all the opportunities inherent in the situation and appreciating the positive as well as the negative aspects of change (Novartis, p.26). If you focus in an all or nothing way; on only the negative or only the positive aspects of the change, you may miss either the potential positives or potential negatives associated with it. Both ideas must be fully examined and explored for the
change to be an optimal experience for you. When you choose to open your mind to all of the possibilities of change, when you choose to embrace change for growth, you are empowering yourself. You will begin to see options and alternatives, where before you saw only obstacles and frustrations.

**Conclusion**

Adult Americans tend to gain weight and become increasingly overweight as they age. While gaining a slight amount of weight with increasing age has been associated with a longer life-span, large weight gains elevate the risks for disease and shorten life expectancy. When the body weight rises from normal to increasingly severe obesity, there is a parallel rise in the rate and relative incidence of serious medical conditions and mortality. There are many aspects that make up the philosophy behind recreation; some of which are the motivational factors that cause us to participate in the activities we do, the limitations that arise from certain types of recreation, and the overall benefits we gain from recreation. In evaluating what some of the main similarities between various age groups' recreational habits are, some are more obvious than others. Some common reasons for recreation throughout each age group include the following: avenues for stress relief, maintaining or improving health, enjoyment of nature, and simply enjoyment of the activity itself. All aspects of recreation must be looked at as goal-oriented and having some benefit to the person in the outcome. This is evident in all of the answers stated by each different age group as to why they choose to participate in the activities they do.
References


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