

***Would you like to do your questionnaires on the Web?
Contact us by E-mail?***

We are in the process of setting up a UNCAHS Website. At this time we are working to make sure we can do this in the safest, most protected way, in order to be certain that any data you might transmit is completely secure. Please send any thoughts you might have on this (are you comfortable with this, would you like to do your questionnaires on the web?) to us at study@uncahs.org or call us at (800)233-5912.

FUNDING by NHLBI and NIA will continue for another 5 years.

We are pleased to report that the National Heart, Lung and Blood Institute and the National Institute on Aging will be continuing to fund the UNC Alumni Heart Study for five additional years. With your help and this additional funding we will continue to study the roles of personality, behavioral risk and protective factors in the development of heart disease and in normal aging.

What to Expect in our 9th Questionnaire?

We will ask you to update us on heart disease, hypertension, diabetes, cholesterol, weight, smoking, exercise, alcohol use, aspirin use; changes in marital status, economic status, work and retirement status; your current status on hostility, anger, depression and well-being. Most of these are questions you have seen before. It is important that we understand the amount, direction and rates of change in important risk and protective factors for heart disease and for normal aging.

What have we learned so far?

We have included in this newsletter the abstracts of seven recent articles and hope you find this interesting. As you will see, we have used data you provided us to help determine what is expected during the middle years in terms of rates of change in personality functioning, dietary patterns and understanding of menopausal status; and to understand how personality factors measured in college are related to adult patterns of exercise and weight change.

Why should I continue in the Study?

As you can see, because we already have so much information about you as you have aged, on average, from about age 18 to age 55 (or if you joined as a spouse for 10 years during midlife), we will be able to discover how psychological factors are related to the maintenance of health and the development of disease during the middle years. We hope you will stay with us as we continue the study. Because you have provided such a wealth of information over time, each and every one you is making an important contribution to research that is sincerely appreciated.

Abstracts of Recently Published Papers

The data you provided while you were in college, as well as later in life, has been important in understanding how personality factors help to explain health and disease outcomes at midlife.

Personality at Midlife: Stability, Intrinsic Maturation, and Response to Life Events

Paul T. Costa, Jr., Jeffrey H. Herbst, and Robert R. McCrae,
National Institute on Aging, Baltimore, MD

Hlene C. Siegler, Duke University Medical Center, Durham, NC

Abstract: Although developmental theories and popular accounts suggest that the midlife is a time of turmoil and change, longitudinal studies of personality traits have generally found stability of rank order and little or no change in mean levels. Using data from 2,274 men and women in their 40s retested after 6 to 9 years, the present study examined two hypotheses: (1) that retest correlations should be no higher than about .60; and (2) that there should be small decreases in Neuroticism, Extraversion, and Openness, and small increases in Agreeableness and Conscientiousness. The study also explored the effects of recalled life events on subsequent personality scores. Results did not support the first hypothesis; uncorrected retest correlations uniformly exceeded .60. This was true for all personality traits, including facets of Agreeableness and Conscientiousness not previously included in longitudinal studies. The hypothesized decreases in Neuroticism, Extraversion, and Openness were found, but Conscientiousness showed a small decrease instead of the predicted increase. Life events in general showed very little influence on the levels of personality traits, although some effects were seen for changes in job and marital status that warrant further research. *Assessment*, 2000;7(4):365-378

Self-Perceptions of Stability and Change in Personality at Midlife: The UNC Alumni Heart Study

Jeffrey H. Herbst, Robert R. McCrae, and Paul T. Costa, Jr.,
National Institute on Aging, Baltimore, MD
John R. Feaganes and Ilene C. Siegler,
Duke University Medical Center, Durham, NC

Abstract: The finding of personality stability in adulthood may be counterintuitive to people who perceive a great deal of change in their own personality. Few longitudinal studies have contrasted subjective and objective personality changes. The purpose of this study is to determine whether self-reported perceived changes in personality are associated with actual changes based on a 6 to 9-year follow-up of 2,242 middle-aged male and female participants of the UNC Alumni Heart Study (UNCAHS). Respondents completed the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) on two occasions, and were asked to reflect back over a six-year period and assess changes in their personality. The majority of respondents ($n = 1,177$; 52.5%) reported they had "stayed the same," while 863 (38.5%) reported they had "changed a little" and 202 (9%) reported they had "changed a good deal." Coefficients of personality profile agreement computed to evaluate global personality change for the three perceived change groups were essentially equivalent. Further, detailed analyses of domain-specific changes in personality suggested that self-perceived and objective changes were discordant in 53% of the cases. Individuals who perceived themselves as basically the same in fact showed declines on four of the five domains, while those who felt that they had increased on the domains were concordant on only Neuroticism and Agreeableness. The present results indicate that perceptions of change account for only a small proportion of the variance of actual change. Self-perceptions of change are not an adequate substitute for objective assessments. *Assessment*, 2000;7(4): 379-388.

Associations Among NEO Personality Assessments and Well-Being At Midlife: Facet-Level Analyses

Ilene C. Siegler and Beverly H. Brummett,
Duke University Medical Center

The association between well-being and personality was examined in 2,379 middle-aged adults. Measures that parallel C. D. Ryff's (1989) psychological model were selected to assess well-being. The 30 facet scales of the NEO-PI-R were used to measure personality. More than 3%

of the facet – well-being correlations within the domains of Neuroticism, Extraversion, and Conscientiousness reached statistical significance, whereas, less than half of the correlations with the domains of Agreeableness and Openness were significant. The facets within each domain demonstrated different patterns of associations with the well-being measures, indicating that facet-level assessments yield additional information. Psychology & Aging, 2000; 15(4):710-714.

Measurement of Dietary Intake in the UNC Alumni Heart Study

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and Ilene C. Siegler, Ph.D., M.P.H. [†]

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Background: Research needs to identify diet and disease associations to provide direction about effecting change in individuals with dietary behaviors that increase risk of chronic disease. Inclusion of dietary assessment in the University of North Carolina Alumni Heart Study (UNCAHS) provides the opportunity to prospectively investigate dietary intake and chronic disease associations with measures of personality and behavioral risk factors.

Methods: Development of the UNCAHS food frequency questionnaire and nutrient intake of 4,443 middle-aged men and women is provided stratified by total fat and vitamin A intake within demographic and health behavior categories.

Results: Alumni consume diets close to that recommended by current dietary guidelines. Both men and women have low calcium intake. Thirty-nine percent of the alumni consume diets with 30% of kilocalories from fat or less and 88% meet the RDA for vitamin A. "Never smokers" had lower fat diets and greater intakes of vitamin A than former or current smokers. Over 54% of alumni currently took vitamin/mineral supplements.

Conclusions: UNCAHS participants will be tracked as they approach older ages with apparently less risk for diet-related chronic diseases than many Americans. The psychosocial correlates of these eating behaviors will be evaluated as disease endpoints occur. Preventive Medicine, 2000;31:56-67.

Personality Factors Differentially Predict Exercise Behavior in Men and Women

Ilene C. Siegler, James A. Blumenthal, John C. Barefoot,
and Bercedis L. Peterson
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National Institute on Aging
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Duke University Behavioral Medicine Research Center

Personality assessed with the Minnesota Multiphasic Personality Inventory (MMPI) in college was used to predict exercise behavior measured at midlife in 3,630 men and 796 women enrolled in the University of North Carolina Alumni Heart Study. Logistic regression models were fitted for each of the MMPI clinical scales to test the predictive effect of personality, gender, and their interaction on adult exercise behavior. Lower depression, social introversion, and psychopathic deviance scores were associated with increased probability of exercising in midlife for both men and women. Furthermore, better psychological health (indexed by lower hypochondriases and psychastenia) in college was generally predictive of increased exercise for men, whereas higher scores on these same factors predicted midlife exercise for women. There were two other patterns of gender interactions: (a) for men, lower scores on hysteria and schizophrenia scales were associated with increased probability of exercising at midlife, whereas these factors were unrelated to exercise for women and (b) for women, lower ego strength and high college scores on paranoia and mania were associated with exercise behavior at midlife. These data suggest that early adulthood personality predictors of exercise behavior at midlife are both gender-neutral and gender-specific; that is, where no gender differences exist, healthier personality traits predict exercise at midlife, and when gender differences do occur, healthier college patterns of personality predict exercise behavior for men and sedentary behavior for women. Women's Health: Research on Gender, Behavior, and Policy, 1987;3(1):61-70.

Perceptions of Menopausal Stage and Patterns of Hormone Replacement Therapy Use

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⁵Women Veteran Comprehensive Health Center, Durham Veterans Affairs
Medial Center, and ⁶Duke comprehensive Cancer Center, Durham, North
Carolina.

Abstract: In 1994, as part of their participation in the University of North Carolina Alumni Heart Study, 1101 women aged 45-51 years answered questions about their menopausal status and current use of hormone replacement therapy (HRT). Little is known about the use of HRT in younger women. We were interested in determining both patterns of HRT use and patient characteristics associated with HRT use in this cohort of women approaching the average age of menopause. After excluding women with breast, endometrial, and ovarian cancer, we studied 1080 women. These women identified themselves as: "There is no indication that I am near menopause" (stage 1, $n = 326$), "I think I may be close to or in the beginning stages of menopause but am not sure" (stage 2, $n = 410$), "I have begun menopause" (stage 3, $n = 202$), and "I have seen through menopause" (stage 4, $n = 142$). The overall rate of HRT use was 22% (0% in stage 1, 8% in stage 2, 52% in stage 3, and 76% in stage 4). Both patterns of HRT use and patient characteristics associated with HRT use differed based on the woman's perception of her menopausal stage. In logistic regression models, where HRT use was the outcome variable, independent predictors of HRT use included stage of menopause, having had a hysterectomy, having had a bilateral oophorectomy, no family history of breast cancer, having had a pelvic examination in the last year, being married, and not participating regularly in physical exercise. A woman's perceptions of her stage in the process of reproductive aging correlates with her use of HRT. Informed decision making about HRT use should be tailored to the individual's perception of her menopausal stage. Journal of Women's Health, 1997;6(4):467-475.

Symptoms of depression and changes in body weight from adolescence to mid-life

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Object: To investigate the relationship of symptoms of depression to weight changes in healthy individuals of normal weight across a follow-up of over 20 years.

Participants and Design: College students (3885 men and 841 women) were administered a self-report depression measure in the mid-1960s. Their baseline body mass index (BMI) was calculated from their college medical records. Participants were contacted by mail in the 1980s and asked to report their current height and weight as well as their smoking and exercise habits. Another measure of depressive symptoms was obtained from 3560 individuals at follow-up. Multiple regression models were used to relate changes in weight to depression score while controlling for background (gender, baseline BMI and the gender by BMI interaction) and behavioral (exercise and smoking) predictors.

Results: The Relationship between depressive symptoms and body weight change took the form of an interaction with baseline BMI ($P < 0.001$). Those with high baseline depression scores gained less weight than their nondepressed counterparts if they were initially lean, but more if they were initially heavy. This trend was especially strong in those with high depression scores at both baseline and follow-up.

Conclusions: The findings support the hypothesis that depression exaggerates pre-existing weight change tendencies. This pattern would not have been detected by an examination of main effects alone, illustrating the need to move toward more complicated interactive models in the study of psychological factors and weight. International Journal of Obesity, 1998;22:1-7.

The text "GO FARTHER!" is rendered in a 3D, blocky font with a metallic, brushed metal texture. The letters are white with grey shading to create a three-dimensional effect. The text is slanted slightly to the right.

**Thank you
for your ongoing
participation
in the**

The text "UNC Alumni Heart Study" is rendered in a 3D, blocky font with a metallic, brushed metal texture. The letters are white with grey shading to create a three-dimensional effect. The text is slanted slightly to the right.