or vice versa. Our findings especially speak to the growing awareness of the deleterious impact of PD features on clinical syndromes in later life, as evidenced by strong comorbidities with anxiety.

PATHOLOGICAL TRAITS AND INTERPERSONAL DIFFICULTIES IN DEPRESSED OLDER ADULTS: CLINICAL VERSUS COMMUNITY SAMPLING

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Personality pathology, represented by high neuroticism and low agreeableness in the Five Factor Model of Personality, has been identified as a predictor of depression in mixed-age samples and preliminary studies of older adults. Research on older people, however, has not examined the differential impact of pathological personality traits and processes on depression or examined them across treatment settings. This secondary analysis examined personality traits and processes as predictors of depression, evaluated the moderating effect of interpersonal problems, and assessed stratification of these personality variables across community and clinical settings. Older adults (N=395) ranging in age from 55 to 99 (M = 72.06; SD = 10.10) from inpatient psychiatric, outpatient medical, and community settings completed self-report measures of personality traits (NEO-FFI Agreeableness and Neuroticism), processes (Inventory of Interpersonal Problems), and depression (GDS-30). Another model predicted worsened depressive symptoms (β = .765, p < .001), as did lower agreeableness (β = -.163, p = .002) and more interpersonal problems (β = .459, p < .001). Findings partially supported the stratification of personality traits and processes by setting. Interpersonal problems moderated neither the neuroticism-depression or agreeableness-depression relationships. Personality traits and processes predict depression in older adults across care settings but do not significantly interact. Levels of pathological traits and processes vary across community and clinical settings.

PERSONALITY CHANGE PROFILES AND CHANGES IN COGNITION AMONG MIDDLE-AGED AND OLDER ADULTS

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Previous research on the relationship between personality traits and cognitive abilities has primarily focused on cross-sectional studies or on specific personality traits in relation to selected cognitive dimensions. The present study extends existing research by exploring associations among 20-year personality change profiles and 10-year cognitive change in middle-aged and older adults. The present study included 2,652 participants of the Midlife in the United States study (MIDUS) ranging in age between 20 - 74 years (M = 46.61, SD = 11.26) at the first of the three measurement occasions. Latent Profile Analysis (LPA) was used to capture profiles of change across the Big Five personality traits of extraversion, conscientiousness, agreeableness, openness, and emotional stability combined. Results of the LPA identified three personality change subgroups: Decreasers, Maintainers, and Increasers. Across the 20 years, the Decreasers showed greater decreases on the Big Five personality traits, the Maintainers remained mostly stable, and the Increasers showed greater personality trait increases. Also, the Maintainers and Decreasers were significantly older than the Increasers. Longitudinal multilevel models were used to examine the relationship between these three personality change profiles and cognitive change. Age, sex, education, physical activity, functional health, and self-rated health were added as covariates. Results show that cognitive decline was greater for the Decreasers and less for the Increasers compared to the other personality change profiles. The results have implications for developing interventions to target personality trait change in middle and later adulthood as a potential means for reducing declines in cognitive functioning.

THE INTERPERSONAL CIRCUMPLEX AND THE ALTERNATIVE MODEL OF PERSONALITY DISORDERS: RELATIONSHIPS AMONG OLDER ADULTS

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Introduction: The interpersonal circumplex model measures interpersonal dysfunction along two axes (communion and agency), resulting in eight unhealthy patterns: Domineering, Vindictive, Cold, Socially Avoidant, Nonassertive, Exploitable, Overly Nurturant, and Intrusive. It is unclear how the circumplex model applies to older adults and their unique biosocial developmental contexts. This study examined relationships between the circumplex and personality disorder features, using the Alternative Model of Personality Disorder’s (AMPD) personality functioning and pathological personality trait constructs.

Method: Older adults (N = 202) completed the Inventory of Interpersonal Problems-Short Circumplex (IIP-SC), the Levels of Personality Functioning Scale-Self-Report (LPFS-SR), and the Personality Inventory for DSM-5 (PID-5) to measure pathological personality traits.

Results: Correlations were computed between the IIP-SC’s eight circumplex scales with the LPFS-SR’s four personality functioning domains and with the PID-5’s five domains. All circumplex scales significantly (p < .001) and positively correlated with all LPFS-SR and PID-5 domains, with large effect sizes (> .45). Next, regressions were conducted, with the LPFS-SR and PID-5 domains predicting each IIP-SC scale. Across the seven regressions, the AMPD constructs accounted for significant variance in the IIP-SC scales, ranging from 38% (Nonassertive) to 64% (Domineering and Cold).

Discussion: Significant overlap between the interpersonal circumplex and the AMPD was demonstrated, but patterns are distinct from previous research among younger adults.

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The circumplex was limited in its relation to the AMPD's personality functioning, but the pathological personality trait model was well represented through the circumplex. Results indicate that the circumplex may have some validity among older adults and warrants further investigation.

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PHYSICAL ACTIVITY AND EXERCISE

ACTIGRAPHY MEASURED PHYSICAL ACTIVITY ON COGNITIVE FUNCTIONING IN OLDER ADULTS
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Physical activity may preserve cognitive functioning in older adults. This study examined associations between objectively measured physical activity and cognitive functioning. We recruited participants (Mage = 75.38 years, SD = 5.99) with (N=26) and without (N=181) cognitive impairment from the University of Kansas Alzheimer’s Disease Center (KU-ADC). We collected cognitive data representing verbal memory, attention, and executive function. Accelerometers (Actigraph GT9X) were used to measure physical activity 24 hours a day for 7 days in a free-living environment. Physical activity was categorized as moderate to vigorous physical activity (MVPA) based on the Freedson (2011) Adult Vector Magnitude cut points. The association between cognitive functioning and total MVPA was evaluated by using multiple regression. We used factor analysis to create three composite scores (verbal memory, attention, executive function) from 11 individual cognitive tests. Compared to verbal memory and attention, results indicate that total MVPA was more strongly associated with executive function ($\beta = 0.001$, $p = .024$). These findings are consistent with the literature suggesting that executive function in older adults may benefit from physical activity. Future research should investigate the physiological mechanisms by which MVPA benefits executive function in contrast to types of activity that might benefit verbal memory and attention.

AGE AND GENDER DIFFERENCES IN LONG-TERM EXERCISE BEHAVIOR FOR OLDER ADULTS WITH HEART DISEASE
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Exercise decreases mortality and hospital admissions. Exercise adherence is challenging, and little is known about exercise adherence especially in older adults with heart disease. To gain an understanding of long-term exercise behaviors in older adults we conducted a cross-sectional study of individuals diagnosed between 2016-2020 with myocardial infarction (MI)/angina. Emails were sent in 2020 to recruit participants. Exercise adherence was measured using the Exercise Adherence Rating Scale (EARS), Godin’s Leisure-Time Activity Scale (GLTEQ) for exercise intensity, and self-report for impact of COVID-19. Descriptive statistics and t-tests were used to analyze data. Eight-hundred and seven individuals (x̅ age 67.3) responded to the on-line survey. The majority were males (68.8%), married, (68.9%), and retired (59.3%). Co-morbidities included hypertension (32%), hyperlipidemia (21%), diabetes (12%), and depression (6.2%). Long-term exercise behaviors were independently observed in participants ≥65yr (n=526) and <65yr (n=281). Females ≥65yo demonstrated higher exercise adherence scores compared with males ≥65yo (1.66 ± 1.1 vs. 1.30 ± 21.7; t = -2.59, p=.010). Conversely, males scored higher in exercise intensity (34.4 ± 24.7 vs. 22.6 ± 21.7; t = 3.84, p=.000). Gender related exercise adherence and exercise intensity did not differ significantly in <65yo ($p=.278$ & $p=.282$, respectively). Exercise frequency decreased in both age groups after COVID-19 Pandemic started, however the decrease was significant only in older adults ($p=.014$) indicating they were at greater risk for exercise problems when faced with environmental barriers. Additional research is recommended as to the impact of environmental factors on exercise adherence in older adults and potential interventions.

BIOMECHANISM AND EXERCISE EFFECT OF FITNESS WALKING USING TWIN WALKING STICKS
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In Japan, walking poles with pairs of sticks developed exclusively for fitness walking have been designed. A new concept of walking style (WS) has been conceived using these walking sticks to “effectively” walk around the city, comprehensive sports parks, or at rehabilitation hospitals. Stick manufacturers are promoting its health benefits; however, evidence supporting these claims is lacking. Hence, this study aimed to measure the influence of walking sticks and evaluate the exercise effect based on functional physical fitness related to WS characteristics. The participants were 12 WS instructors. They engaged in WS at a comfortable speed after walking normally at the same speed (WN) for ~5 m (seven times), followed by WS again. The walking speed, step length, stride width, walk ratio, one-leg support time, and trajectory of the center of gravity (CG) (in the horizontal and vertical directions of one walking cycle) calculated from the whole-body skeleton model were analyzed. The gait of WS increased the step length, step width, and walking ratio as compared with that of WN ($p<0.05$). WS likely reduce cadence and one-leg support time ($p<0.05$). The CG locus in the left-right direction showed no significant differences between WS and WN. The maximum value of the CG locus in the vertical direction was high in WS ($p<0.05$). WS can be used as a navigation training tool that improves a walker’s exercise efficiency and left-right leg coordination, thereby improving walking posture. This may help reduce the anxiety due to injuries and pain that may occur while walking.