

Community-Dwelling Adults Versus Older Adults: Psychopathology and the Continuum Hypothesis

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Little empirical evidence is available on older adults regarding the existence of a continuum between “normal” personality traits and DSM-IV-TR Axes I and II disorders (American Psychiatric Association, 2000). Given the typical complexity of clinical presentations in advanced age, it is feasible to expect a dimensional conceptualization of psychopathology to apply to older adults. In this pilot investigation, we first tested age differences in psychopathology, upholding the view that older adults should be considered separately from younger individuals in research on psychopathology. Then, in support of the dimensional approach, we tested the hypothesized continuity between normality and psychopathology by verifying the fulfillment of two operational criteria of continuity. A nonclinical sample of 100 Italian respondents was divided into two groups (50 people per group, 25 women and 25 men), aged 25–64 and 65–84, respectively. The instruments used were a measure of normal personality, SFERAS (Boncori & Barruffi, 2004) and one of Axes I and II psychopathology, TALEIA-400A (Boncori, 2007). A MANOVA demonstrated a significant effect on both measures, with older adults achieving higher Axis I scores and higher scores on normal personality traits connected to anxiety. The continuum hypothesis was confirmed on older and younger adults through correlational analyses that verified the fulfillment of both continuity criteria. Our results show that Italian older adults differ significantly in psychopathology from younger individuals; however, contrary to findings from other countries, in a negative direction. The continuity results (although in need of replication with larger samples, utilizing statistical methods better suited for these analyses such as taxometric procedures) offer preliminary support for the notion that the dimensional approach to psychopathology could work well in older age.

Psychopathology in older age is characterized by a relatively high prevalence of certain disorders ranging from dementia and cognitive, mood, and anxiety disorders, to schizophrenia and substance abuse (Bernacchio et al., 2009). The United States (U.S.) Department of Health and Human Services ([USDHHS] 1999) issued a projection asserting that increased instances of

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mental illnesses like schizophrenia, dementia, and depression would invariably produce unique problems for older Americans; this could indeed be the case now, over 10 years later. Outside of the U.S., the situation is similar: for instance, Trollor, Anderson, Sachdev, Brodaty, & Andrews (2007), who used the Australian National Mental Health and Well-Being Survey on a large sample of noninstitutionalized community-dwelling older Australians, found that about 16% of their respondents met criteria for a psychiatric disorder in the past 12 months. Apart from cognitive impairment (7.4%), the most common disorders were personality disorder (2.9%), major depression (2.4%), and generalized anxiety disorder (2.4%), with the prevalence of psychoses at 0.1%. In particular, within the *schizophrenic spectrum*, delirium, i.e., an acute confusional state, occurs in as many as 56% of older adults within general hospital populations (Inouye, 2006); delirium is associated with high social costs (because it is uncommon in community-dwelling older adults, it is not covered in depth herein). Conversely, reports of depressive and anxious symptomatology are frequent among nonclinical older populations, as summarized next, often failing to satisfy full diagnostic criteria, yet posing a significant challenge for the individuals involved and a resulting cost increase for related health services.

Depression, according to the National Institute of Mental Health ([NIMH] 2009), is the major mental health concern of older individuals. Depressive symptoms in the general population are frequent among older Caucasians, with depression prevalence rates ranging from 1% to 16% (Djernes, 2006). Both major and minor depression in older adults increase the risk of physical and cognitive disability (Dalle Carbonare et al., 2009; Hybels, Pieper, & Blazer, 2009), exacerbate the outcome of medical illnesses (Alexopoulos, 2005), increase the odd ratios for attempted suicide (Wiktorsson, Runeson, Skoog, Östling, & Waern, 2010), and are identified in 80% of people 74 years and older who commit suicide (Conwell, Duberstein, Hermann, & Caine, 1996). Nevertheless, as noted by Alexopoulos (2005), late-life depression remains underrecognized and undertreated, despite the fact that thorough clinical assessment and subsequent treatment of depressive symptomatology (even without meeting diagnostic criteria) is highly needed in older age. This necessity is further underscored by recent findings such as those of Vahia et al. (2010), who discovered that, among community-dwelling older women residing in the U.S., untreated subthreshold depression is related to significantly worse physical, psychological, and cognitive functioning, as well as lower self-ratings regarding successful aging.

Anxiety in older age is often related to depression, contributing to its severity significantly more than medical conditions, cognitive impairment, and negative psychosocial circumstances (Flint & Rifat, 2002). Among various anxiety syndromes, generalized anxiety disorder (GAD) is prevalent among older adults and often co-occurs with depression (Schoevers, Deeg, van Tilburg, & Beekman, 2005). GAD is often undiagnosed and left untreated, which commonly leads to chronicity and physical disability (Porensky et al., 2009). Some anxiety disorders have a particularly high prevalence in the 65+ population. For example, in a national Swedish sample of “nondemented” older individuals, social phobia was diagnosed in over 24% of the 904 research participants (Karlsson et al., 2009), and the prevalence of phobic disorders in the general population can be as high as 12% over a one- to six-month period (Krasucki, Howard, & Mann, 1998). The six-month prevalence of posttraumatic stress disorder (PTSD) in community-based Dutch older adults (age 55–85) is a modest 2.0% (van Zelst, de Beurs, Beekman, van Dyck, & Deeg, 2006), yet, subthreshold PTSD prevalence is a high 17.4%. Failure to meet full criteria for an anxiety disorder is not automatically a sign of adequate functioning. On the contrary, van Zelst et al. found the effects of full and subthreshold PTSD to be

highly comparable in terms of impaired well-being and functioning, as well as higher use of health care facilities in later life. Thus, it is certainly important to assess psychiatric symptomatology before it is a fully diagnosable condition in older age.

In clinical practice, it is often difficult to distinguish Axis II personality disorders of the Diagnostic Statistical Manual-IV-TR ([DSM-IV-TR]; American Psychiatric Association, 2000) from Axis I disorders, situation-specific behaviors, and cultural roles (Zweig & Hillman, 1999). Hence, it is critical to identify quantitative variations and graded transitions between older adults' normality and psychopathological symptomatology, as encouraged by scholars such as Amore, Tagariello, Laterza, and Savoia (2007). This is supported further by the consideration that, in older age, individuals could fulfill criteria for multiple disorders and/or find themselves at the threshold of two adjacent clinical syndromes. Thus, it is important to test hypotheses of continuity between normal personality traits, subthreshold disorders, and diagnosable psychopathology in older samples, which has been suggested in prior seminal research (e.g., Canuto et al., 2009). Researchers have tested dimensional conceptualizations of psychopathological constructs in nongeriatric studies with good results. For instance, posttraumatic stress disorder appears to be best conceptualized dimensionally as a reflection of the upper-end of a stress-response continuum in male combat veterans (Ruscio, Ruscio, & Keane, 2002), and four of six possible subtypes of obsessive-compulsive disorder (OCD) are best conceptualized dimensionally in adults diagnosed with OCD (Haslam, Williams, Kyrios, McKay, & Taylor, 2005). Similarly, Slade and Andrews (2004) found support for an improved conceptualization of depression in community-dwelling adults as a continuously distributed syndrome instead of a discrete one.

Surprisingly (given the aging of the population of many countries around the world), it is still unclear whether nonclinical populations of older adults could benefit from a dimensional diagnostic perspective, as published studies in this geriatric area are scarce. Among the existing research, a meta-analytic study on personality disorders after age 50 revealed the usefulness of adopting a dimensional approach with older adults and was critical of current literature, which reportedly underestimated the clinical relevance of personality disorders in old age (Abrams & Horowitz, 1999). Available empirical evidence in this area on clinical older populations illustrates that, for instance, five distinct dimensions of delusions can emerge upon adopting a dimensional approach with patients experiencing psychotic major depression (aged 60 or older (Gournellis et al., 2009): incitation to actions, delusional strength, incomprehensibility, acute upsetting, and delusional organization. Also, older patients in primary care who exhibit considerable depressive symptomatology often do not meet DSM-IV-TR criteria for dysthymia or depression, as subsyndromal depression is a clinically significant syndrome that is nonetheless beyond diagnostic categories (Lyness et al., 2006). Moreover, older adults who are evaluated in primary care settings often present severe comorbidity of anxious, depressive, and/or somatoform disorders (e.g., Hanel et al., 2009) that is not easily amenable to a categorical diagnosis. Additionally, according to Abrams, Spielman, Alexopoulos, and Klausner (1998), posttreatment functional deficits among depressed older adults are predicted by personality disorder traits, underscoring the need to study normal, subthreshold, and diagnosable conditions as well as their potential interrelation in older age.

Literature on the dimensional approach is also scarce regarding whether older and younger adults obtain comparable normality and psychopathology findings; older individuals might provide responses significantly different from those of younger adults, potentially requiring special attention in psychiatric care. Available research findings indicate that generalized anxiety

disorder levels (e.g., Nuevo et al., 2008) as well as depression and anxiety in general are lower in older age (e.g., George, Blazer, Winfield-Laird, Leaf, & Fischback, 1988). According to Erskine, Kvavilashvili, Conway, and Myers (2007), the frequent findings of lower psychopathology in later life are likely due, at least partially, to lower levels of rumination and intrusive thoughts as well as higher positivity and repressive coping common in older age. Still, because age-related dimensional differences in the psychopathology continuum have not yet been fully investigated, more research is needed in this clinical area.

In view of the above considerations, the traditional, category-based conceptualization of psychopathology is potentially limiting, especially for populations such as older adults, who may not fit into a diagnostic formulaic mold, as previously highlighted. In the current study, we endeavored to shed additional light on this neglected geriatric topic and explore age-related differences in psychiatric symptomatology of community-dwelling adults by adopting a dimensional perspective. Our first hypothesis predicted significant age differences in answers provided on two tests, one of normal personality and one of Axes I and II psychopathology, supporting the notion that older adults are a unique population and should not be collapsed into a single group with younger adults. Moreover, in support of the dimensional diagnostic approach, we hypothesized finding empirical evidence of continuity between normality and psychopathology in both age groups.

METHOD

Participants

We gathered a nonclinical, community-dwelling sample of 100 adults (50 men and 50 women) residing in Rome, Italy, and divided it into the following two groups: group 1, containing individuals aged 25 to 64 (comprising university students, state and private company employees, athletes, and business owners); and group 2, including respondents aged 65 and older (primarily retirees, plus a few individuals still employed at state and private companies). There were 25 women and 25 men in each group. All participants were Italians, born in central or southern Italy. Additional demographic characteristics of the sample are illustrated in Tables 1 and 2. Inclusion criteria required that participants be over the age of 18 and fluent in Italian. The exclusion criterion was poor health (assessed by using a clinical screening interview, as discussed later). Recruitment strategies (implemented via collaborations with senior centers and the Roman University of the Third Age) included convenience and snowball sampling; the latter involved requests for referral among participants to other individuals who might have been interested in the study.

Procedure

The Institutional Review Board Committee of the Department of Psychology at La Sapienza University of Rome approved conducting the present research. Research assistants (RAs) gathered data by carefully following a standardized testing procedure involving one-on-one administration of the assessment battery at locations such as participants' homes or senior centers. Specifically, to homogenize battery administration as much as possible, all testing materials were

TABLE 1
 Characteristics of the 25–64-Years-Old Group ($N=50$)

<i>Variable</i>	<i>M (SD)</i>	<i>N</i>	<i>%</i>
Age	40.54 (10.99)	50	
Age subgroups			
Young-adults (25–39)		30	60
Middle-aged-adults (40–64)		20	40
Education			
Less than high school		2	4
High school		24	48
Bachelor's degree		14	28
Graduate degree		10	20
Marital status			
Single		14	28
Divorced		4	8
Married		31	62
Widowed		1	2

administered by clearly reading the instructions for each measure to each subject. RAs were instructed to emphasize that (a) there were no right or wrong answers; (b) all items necessitated completion; (c) special attention was required to facilitate correspondence between the number of each question within the measures and the answers provided on the answer sheet; and (d) only one answer was allowed per question. Moreover, in view of the substantial number of questions, to minimize fatigue and potential related mistakes (as well as a tendency to provide random answers to complete the assessment), administration occurred during two consecutive sessions separated by a 20-minute break. To ensure anonymity, each respondent was assigned a random numerical code that was hand-written on his/her answer sheets (it was not possible to connect such a code with the identity of the participant).

TABLE 2
 Characteristics of the 65-Years-Old-Plus Group ($N=50$)

<i>Variable</i>	<i>M (SD)</i>	<i>N</i>	<i>%</i>
Age	72.30 (5.69)	50	
Age subgroups			
Young-old (65–74)		29	58
Old-old (75–84)		21	42
Education			
Less than high school		29	58
High school		15	30
Bachelor's degree		3	6
Graduate degree		3	6
Marital status			
Single		10	20
Divorced		6	12
Married		27	54
Widowed		7	14

Instruments

Clinical Screening Interview

The second and fourth authors created a simple interview protocol to screen out individuals who required special care or had severe medical conditions. Sample interview questions include “Have you had any major health problems lately?” and “Do you need help in your activities of daily living?” This screener also includes specific questions to rule out conditions such as stroke or Parkinson’s disease. None of the prospective participants failed to qualify for inclusion in this study. Data from this brief interview were used exclusively for screening purposes and were not included in the data analyses.

Demographic Information

Data on demographics such as age, gender, education, and marital status were gathered via the demographic portion of TALEIA 400A, an instrument described below.

SFERAS

An acronym for the Sixteen Factors Explored Relatively to Situations (Boncori & Barruffi, 2004), SFERAS is an Italian measure that allows for the quantification of “normal” personality features in the manner proposed in Cattell’s (1979) classic personality model. This instrument contains 16 primary scales of personality and two control scales. Respondents rate its items using a Likert-type answer format with four levels of temporal references: never, sometimes, often, and always. In contrast with Cattell’s 16 factorial scales of the 16PF, SFERAS does not contain scale B (reasoning), while it has a scale quantifying *healthy narcissism*. It also contains two control scales: missing answers and social desirability. High scores on these scales suggest the possibility that a respondent did not provide dependable (given the high quantity of omissions) or honest (DS) answers.

SFERAS scales are named as follows: A (warmth), C (emotional stability), E (dominance), F (liveliness), G₁ (rule-consciousness), G₂ (narcissism), H (social boldness), I (sensitivity), L (vigilance), M (abstractedness), N (shrewdness), O (guilt proneness), Q₁ (openness to change), Q₂ (self-reliance), Q₃ (high self-concept control), and Q₄ (tension). Research on the reliability of SFERAS has evidenced a strong test-retest reliability coefficient (i.e., $r = .81$ on the average across all the scales; Boncori, 2012). SFERAS scores are standardized in sten scores and do not have cut-off scores, as they measure “normal” personality traits.

TALEIA

TALEIA-400A (referred to as TALEIA following, to ensure brevity) is an acronym for Test for Axial Evaluation and Interview for clinical, personnel, and guidance Applications. A measure developed in Italy by the third author and translated into several languages, TALEIA quantifies both clinical and personality disorders. Its 400 items refer mainly to specific everyday situations. Subjects are required to report the frequency of each behavioral occurrence on a four-level Likert-type scale (always, often, sometimes, and never). Psychometric research on

the English translation of this instrument is in progress in the U.S. (Laganà & Boncori, 2012). TALEIA's 18 clinical scales are based on the diagnostic criteria of the DSM-IV-TR and the ICD-10. Its content validity has been tested initially through consultation of a large panel of clinical experts for verification of the scales' content. The first eight scales cover mood, anxiety, and psychotic disorders (i.e., Axis I disorders of the DSM-IV-TR). Please note that TALEIA's (as well as SFERAS's) acronyms often do not correspond to the English translation of the scales' names: scale S (schizophrenia and delirium), D (depression), M (hypomania and mania), AA (acute anxiety-panic attacks), FO (phobic syndromes), SOC (obsessive-compulsive syndrome), AG (generalized anxiety), and AL (eating disorders). Ten scales cover Axis II personality disorders of the DSM-IV-TR: scale PP (paranoid personality disorder), PSK (schizoid personality disorder), PSKT (schizotypal personality disorder), PAS (antisocial personality disorder), PB (borderline personality disorder), PI (histrionic personality disorder), PN (narcissistic personality disorder), PEV (avoidant or anxious personality disorder), PD (dependent personality disorder), and POC (anarchistic/obsessive-compulsive personality disorder).

Three validity scales control for "faking good" attitudes: positive impression management (scale L), "faking bad" attitudes (scale F), and random unreliable answers (scale INC). Research on TALEIA's reliability, tested via test-retest as well as parallel-form methods, has yielded robust results (average $r = .83$ for the test-retest method and $r = .74$ between parallel forms of different length; Boncori, 2007). As reported by Boncori, in several Italian studies, TALEIA's scores have been compared to scores on well-known psychopathological measures such as the MMPI (Hathaway & McKinley, 1943) and the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989). The findings of these comparison studies demonstrated Pearson's correlation coefficients mostly beyond the $p = .01$ significance level. TALEIA provides "dimensional" quantifications of each disorder; like other well-known psychopathological tests (e.g., Butcher et al.'s MMPI-2), two standard deviations above average (i.e., sten score = 10) are regarded as a cautionary threshold that, as recommended in the test manual, should ideally be considered along with known data regarding the prevalence of each disorder in the population assessed.

Analytic Strategy

The dataset was elaborated using the specific software packages of SFERAS and TALEIA. Scores were standardized to account for gender differences. Data were subsequently imported in the software Statistica, through which we conducted a multivariate analysis of variance (MANOVA) to compare groups on scores relative to the two measures. This was followed by a post-hoc test (Scheffé), as well as correlational analyses of SFERAS and TALEIA scores. We set two operational criteria to be verified in an effort to confirm the hypothesized continuity between normality and psychopathology: (a) a substantial amount (defined by the authors as at least 40%) of the bivariate correlations among scale scores would have been significant at the $p < .05$ level, showing a linear relationship among various scales/clinical constructs; (b) the strongest correlations would have been achieved for scales measuring similar clinical constructs, even if assessed via separate instruments and conceptualized as belonging to different Axes. With regard to missing data, as is customary for personality tests, less than 10% of missing answers on each scale is considered acceptable, which was the case in the current study; thus, no subjects were eliminated.

RESULTS

Multivariate Analysis of Variance (MANOVA)

First, to ascertain whether the two age groups could have been considered as one, we conducted a MANOVA (described in Table 3) to test for age differences in normal and psychopathology-related scores in the total samples. Sten scores represented the dependent variables on each scale of SFERAS and TALEIA, and the independent variable was age. For SFERAS, differences related to age reached $p < .0001$ level (Wilks' Lambda¹ = 0.55 and Rao's $F^2 = 3.83$, for $df_1 = 17$ and $df_2 = 82$). For TALEIA, the p level of the overall score differences due to age was similar, i.e., $< .0001$ (Wilks' Lambda = 0.52 and Rao's $F = 3.36$, for $df_1 = 21$ and $df_2 = 78$). Wilks' Lambda ranges from 0 (perfect discrimination) to 1 (no discrimination). Rao's F (or R) is calculated from Lambda, and it is regarded as a good approximation to F when two or more groups with any number of dependent variables are compared (Tatsuoka, 1988, p. 93).

These findings corroborated the hypothesis that the two groups belonged to different populations. Post-hoc tests showed significant differences in many SFERAS scales related to anxiety. Specifically, the older group was more guilt-prone (scale O), sensitive (scale I), self-reliant as opposed to gregarious (scale Q2), tense (Q4) and in control of their own self-concept (Q3). Conversely, older respondents were less rule conscious (G1), narcissistic (G2), and socially bold (scale H), than their younger counterpart.

For TALEIA, significant differences were obtained for all the scales belonging to Axis I (with the only exception being M, mania and hypomania), as well as all the scales related to Cluster A personality disorders, two scales related to Cluster B (antisocial personality disorder and borderline personality disorder), and two scales related to Cluster C (avoidant personality disorder and dependent personality disorder). Group 2 scored systematically higher than group 1 in the pathological direction, although all the mean scores remained within the nonpathological range, even for older adults. Subsequent statistical analyses aimed at verifying the psychopathology continuity hypothesis were conducted separately on the two groups.

Correlations Between Normal Traits and Disorders

To test the first continuity criterion, we conducted separate correlational analyses between the scales of the two measures for groups 1 and 2. It should be noted that, given the sample size of each group ($N = 50$, $df = 48$), Pearson's correlation coefficients would have exceeded the level of statistical significance ($p = .05$) only if $r > |.28|$. As expected (and shown in Tables 4 and 5), many of the bivariate correlations among scale totals were significant, showing a linear relationship among a variety of normal personality traits and clinical constructs of the Axes I and II of the DSM-IV-TR. Tables 4 and 5 do not display the correlational coefficients between control scales, as they are irrelevant to the continuum hypothesis. Among younger adults, 141 of the 288 coefficients were statistically significant; i.e., 49% of them. Within the group of older adults, 122 out of 288 correlation coefficients (i.e., 42% of them) were statistically significant. SFERAS scale N (shrewdness) was significantly related to only one or two TALEIA scales describing disorders in both age groups. This could be expected, given that shrewdness is a normal trait independent from criteria used to describe disorders. The high percentage of the above-mentioned

TABLE 3
MANOVA Findings of the Two Age Groups on TALEIA and SFERAS Scales

<i>TALEIA-400A scales</i>	<i>M {1} Age 25-64</i>	<i>M {2} Age 65+</i>	<i>p level</i>	<i>SFERAS scales</i>	<i>M {1} Age 25-64</i>	<i>M {2} Age 65+</i>	<i>p level</i>
S	3.57	5.00	.000**	A	5.99	5.21	.068 ^{ns}
D	3.87	5.68	.000**	C	5.72	5.09	.119 ^{ns}
M	4.79	4.61	.596 ^{ns}	E	5.45	5.95	.251 ^{ns}
AA	4.04	5.10	.000**	F	5.56	5.26	.500 ^{ns}
FO	4.48	5.38	.008**	G ₁	6.42	5.53	.015*
SOC	4.01	4.83	.022*	G ₂	5.33	4.43	.016*
AG	4.02	5.27	.000**	H	5.77	4.71	.009**
AL	4.15	5.62	.000**	I	5.12	5.96	.042*
PP	4.23	5.49	.000**	L	5.07	5.45	.348 ^{ns}
PSK	4.32	5.78	.000**	M	5.53	5.13	.337 ^{ns}
PSKT	3.69	5.41	.000**	N	5.82	5.17	.102 ^{ns}
PAS	3.92	4.79	.002**	O	4.53	6.18	.000**
PB	3.68	4.67	.000**	Q ₁	5.22	5.87	.110 ^{ns}
PI	4.25	4.57	.327 ^{ns}	Q ₂	5.18	6.34	.006**
PN	4.34	4.41	.859 ^{ns}	Q ₃	6.08	5.01	.007**
PEV	4.51	6.28	.000**	Q ₄	4.82	5.67	.017*
PD	4.96	5.72	.043*	DS	5.65	5.25	.278 ^{ns}
POC	5.57	5.55	.953 ^{ns}				
L	7.03	5.86	.000**				
F	3.98	5.27	.000**				
INC	4.51	4.99	.089 ^{ns}				

** = significant at $p < .01$ level.

* = significant at $p < .05$ level.

^{ns} = $p > .05$ level.

significant findings satisfied the first criterion formulated to test the appropriateness of a dimensional approach to psychopathology.

The last analytic step included verification of whether the strongest correlations would have been achieved among similar constructs, regardless of the measures used and of the Axis to which the two constructs belonged. Data analyses revealed that this criterion was fulfilled, providing further empirical evidence in support of the continuity hypothesis, as illustrated in Tables 4 and 5. Due to space limitations, the descriptive information provided below is concentrated on three areas of primary psychopathological concern in older age: the schizophrenic spectrum, mood disorders, and anxiety disorders.

In the geriatric group, TALEIA scales referring to the schizophrenic spectrum (S, schizophrenia and delirium; PSK, schizoid personality disorders; and PSKT, schizotypal personality disorders) achieved significant negative correlations with SFERAS scales describing warmth (A), emotional stability (C), liveliness (F), narcissism (G₂), and self-concept control (Q₃); there were also significant positive correlations with scales describing vigilance as opposed to trust (L), abstractedness (M), guilt proneness (O), and self-reliance as opposed to gregariousness (Q₂). Group 1 displayed a different pattern, with only the guilt-proneness scale (O) significantly associated with the three above mentioned scales. Vigilance as opposed to trust (L) and abstractedness (M) correlated significantly only with S (schizophrenia and delirium). The two scales

TABLE 4
Correlation Coefficients Between the Scales of SFERAS and Those of TALEIA-400A for Group 1 (Aged 25–64)

	A	C	E	F	G ₁	G ₂	H	I	L	M	N	O	Q ₁	Q ₂	Q ₃	Q ₄	DS
S	-.27 ^{ns}	-.06 ^{ns}	-.10 ^{ns}	-.25 ^{ns}	.04 ^{ns}	-.28 ^{ns}	-.20 ^{ns}	.33*	.40**	.39**	-.10 ^{ns}	.54**	-.11 ^{ns}	-.12 ^{ns}	-.04 ^{ns}	.34**	-.19 ^{ns}
D	-.05 ^{ns}	-.32*	-.52**	-.63**	.10 ^{ns}	-.66**	-.65**	.59**	.07 ^{ns}	.28*	-.18 ^{ns}	.72**	-.37**	-.46**	.21 ^{ns}	.24 ^{ns}	-.04 ^{ns}
M	-.06 ^{ns}	.15 ^{ns}	.42**	.41**	-.04 ^{ns}	.26 ^{ns}	.49**	-.05 ^{ns}	.53**	.39**	-.17 ^{ns}	-.08 ^{ns}	.17 ^{ns}	-.01 ^{ns}	-.25 ^{ns}	.43**	-.32*
AA	.01 ^{ns}	-.31*	-.41**	-.45**	.19 ^{ns}	-.47**	-.46**	.53**	.10 ^{ns}	.22 ^{ns}	-.04 ^{ns}	.72**	-.32*	-.33*	.18 ^{ns}	.32**	-.03 ^{ns}
FO	-.11 ^{ns}	-.22 ^{ns}	-.40**	-.62**	.07 ^{ns}	-.56**	-.69**	.55**	.00 ^{ns}	.30*	-.13 ^{ns}	.64**	-.38**	-.38**	.37**	.20 ^{ns}	-.03 ^{ns}
SOC	-.04 ^{ns}	-.17 ^{ns}	-.41**	-.49**	.15 ^{ns}	-.54**	-.41**	.61**	.24 ^{ns}	.29*	-.21 ^{ns}	.66**	-.26 ^{ns}	-.44**	.11 ^{ns}	.38**	-.01 ^{ns}
AG	-.02 ^{ns}	-.31*	-.34*	-.51**	.19 ^{ns}	-.57**	-.51**	.58**	.19 ^{ns}	.30*	-.17 ^{ns}	.76**	-.30*	-.33*	.17 ^{ns}	.37**	-.09 ^{ns}
AL	-.08 ^{ns}	-.32*	-.52**	-.52**	-.01 ^{ns}	-.67**	-.59**	.57**	.08 ^{ns}	.25 ^{ns}	-.14 ^{ns}	.65**	-.29*	-.57**	.12 ^{ns}	.23 ^{ns}	-.05 ^{ns}
PP	-.29*	-.34*	-.09 ^{ns}	-.40**	.07 ^{ns}	-.58**	-.37**	.39**	.55**	.23 ^{ns}	-.12 ^{ns}	.63**	-.18 ^{ns}	-.22 ^{ns}	.01 ^{ns}	.43**	-.23 ^{ns}
PSK	-.42**	.05 ^{ns}	-.16 ^{ns}	-.53**	.12 ^{ns}	-.35 ^{ns}	-.45**	.17 ^{ns}	.14 ^{ns}	.11 ^{ns}	-.15 ^{ns}	.35*	.00 ^{ns}	.07 ^{ns}	.21 ^{ns}	.24 ^{ns}	.07 ^{ns}
PSKT	-.32*	-.12 ^{ns}	-.30*	-.59**	.03 ^{ns}	-.52**	-.56**	.45**	.23 ^{ns}	.35*	-.26 ^{ns}	.67**	-.31*	-.21 ^{ns}	.16 ^{ns}	.25 ^{ns}	-.08 ^{ns}
PAS	-.15 ^{ns}	-.34 ^{ns}	.24 ^{ns}	.04 ^{ns}	-.05 ^{ns}	-.23 ^{ns}	.01 ^{ns}	.20 ^{ns}	.60**	.30*	-.31*	.34*	.02 ^{ns}	-.15 ^{ns}	-.29*	.44**	-.52**
PB	-.17 ^{ns}	-.15 ^{ns}	.26 ^{ns}	.15 ^{ns}	-.26 ^{ns}	-.10 ^{ns}	.18 ^{ns}	.08 ^{ns}	.66**	.38**	-.22 ^{ns}	.23 ^{ns}	.07 ^{ns}	-.11 ^{ns}	-.34*	.54**	-.45**
PI	-.01 ^{ns}	-.03 ^{ns}	.36*	.51**	.02 ^{ns}	.10 ^{ns}	.41**	.02 ^{ns}	.57**	.32*	-.06 ^{ns}	.06 ^{ns}	.14 ^{ns}	-.06 ^{ns}	-.39**	.59**	-.43**
PN	-.28*	.13 ^{ns}	.58**	.41**	-.01 ^{ns}	.29*	.49**	-.32 ^{ns}	.58**	.18 ^{ns}	-.05 ^{ns}	-.14 ^{ns}	.21 ^{ns}	.33*	-.25 ^{ns}	.41**	-.47**
PEV	-.13 ^{ns}	-.23 ^{ns}	-.45**	-.54**	.11 ^{ns}	-.64**	-.67**	.61**	.06 ^{ns}	.22 ^{ns}	-.01 ^{ns}	.73**	-.40**	-.29*	.17 ^{ns}	.23 ^{ns}	.05 ^{ns}
PD	.21 ^{ns}	-.21 ^{ns}	-.68**	-.45**	.11 ^{ns}	-.58**	-.64**	.66**	-.23 ^{ns}	.08 ^{ns}	.03 ^{ns}	.56**	-.38**	-.56**	.17 ^{ns}	.08 ^{ns}	.28*
POC	-.27 ^{ns}	.01 ^{ns}	-.11 ^{ns}	-.36**	.48**	-.24 ^{ns}	-.09 ^{ns}	.28 ^{ns}	.23 ^{ns}	.16 ^{ns}	-.03 ^{ns}	.37**	-.07 ^{ns}	.03 ^{ns}	.13 ^{ns}	.13 ^{ns}	.11 ^{ns}
L	.23 ^{ns}	.47**	.04 ^{ns}	.29*	.04 ^{ns}	.57**	.33*	-.43**	-.48**	-.40**	.24 ^{ns}	-.70**	.21 ^{ns}	.13 ^{ns}	.27 ^{ns}	-.37**	.44**
F	-.21 ^{ns}	-.27 ^{ns}	-.33*	-.53**	.03 ^{ns}	-.62**	-.58**	.55**	.28 ^{ns}	.35*	-.26 ^{ns}	.77**	-.35*	-.33*	.14 ^{ns}	.35**	-.16 ^{ns}
INC	-.01 ^{ns}	-.02 ^{ns}	-.27 ^{ns}	-.19 ^{ns}	.16 ^{ns}	-.20 ^{ns}	-.35 ^{ns}	.27 ^{ns}	.08 ^{ns}	.07 ^{ns}	-.08 ^{ns}	.28*	.02 ^{ns}	-.18 ^{ns}	.12 ^{ns}	.00 ^{ns}	.04 ^{ns}

Note. Statistically significant coefficients of $r > |.27|$ (which exceeds the level of statistical significance of $p = .05$) are evidenced in bold.

** = significant at $p < .01$ level.

* = significant at $p < .05$ level.

^{ns} = $p > .05$ level.

TABLE 5
Correlation Coefficients Between the Scales of SFERAS and Those of TALEIA-400A for Group 2 (Aged 65-84)

	A	C	E	F	G ₁	G ₂	H	I	L	M	N	O	Q ₁	Q ₂	Q ₃	Q ₄	DS
S	-.54**	-.31*	.21 ^{ns}	-.54**	-.32*	-.32*	-.26 ^{ns}	.19 ^{ns}	.48**	.50**	-.14 ^{ns}	.62**	.17 ^{ns}	.51**	-.34*	-.21 ^{ns}	-.36**
D	-.43**	-.41**	-.25 ^{ns}	-.46**	-.24 ^{ns}	-.43**	-.62**	.34*	.22 ^{ns}	.45**	-.07 ^{ns}	.77**	.01 ^{ns}	.07 ^{ns}	-.18 ^{ns}	.23 ^{ns}	-.42**
M	.24 ^{ns}	.46**	.00 ^{ns}	.48**	-.03 ^{ns}	.31*	.45**	-.02 ^{ns}	.11 ^{ns}	.30*	.25 ^{ns}	-.21 ^{ns}	.26 ^{ns}	-.18 ^{ns}	.22 ^{ns}	.10 ^{ns}	.05 ^{ns}
AA	-.05 ^{ns}	-.35*	-.22 ^{ns}	-.27 ^{ns}	-.15 ^{ns}	-.24 ^{ns}	-.43**	.24 ^{ns}	.31*	.22 ^{ns}	-.31*	.35*	.04 ^{ns}	-.17 ^{ns}	.04 ^{ns}	.25 ^{ns}	-.13 ^{ns}
FO	-.30*	-.47**	-.12 ^{ns}	-.44**	-.21 ^{ns}	-.51**	-.51**	.38**	.28 ^{ns}	.33*	-.19 ^{ns}	.57**	-.12 ^{ns}	.02 ^{ns}	-.06 ^{ns}	.30*	-.30*
SOC	-.08 ^{ns}	-.06 ^{ns}	-.25 ^{ns}	-.34*	-.14 ^{ns}	-.36*	-.28*	.32*	.41**	.31*	-.02 ^{ns}	.40**	.01 ^{ns}	-.20 ^{ns}	.16 ^{ns}	.10 ^{ns}	-.12 ^{ns}
AG	-.27 ^{ns}	-.40**	-.21 ^{ns}	-.43**	-.22 ^{ns}	-.44**	-.63**	.37**	.35**	.28 ^{ns}	-.10 ^{ns}	.59**	.00 ^{ns}	-.07 ^{ns}	-.07 ^{ns}	.29*	-.32*
AL	-.29*	-.17 ^{ns}	-.33*	-.20 ^{ns}	-.15 ^{ns}	-.31*	-.39**	.37**	.22 ^{ns}	.44**	.04 ^{ns}	.61**	.00 ^{ns}	-.13 ^{ns}	-.04 ^{ns}	.25 ^{ns}	-.35*
PP	-.19 ^{ns}	-.23 ^{ns}	.00 ^{ns}	-.24 ^{ns}	-.31*	-.32*	-.19 ^{ns}	.26 ^{ns}	.45**	.44**	-.22 ^{ns}	.43**	.14 ^{ns}	-.04 ^{ns}	-.07 ^{ns}	.20 ^{ns}	-.32*
PSK	-.65**	-.39**	.26 ^{ns}	-.57**	-.18 ^{ns}	-.28*	-.43**	-.03 ^{ns}	.23 ^{ns}	.10 ^{ns}	-.21 ^{ns}	.63**	-.12 ^{ns}	.58**	-.45**	-.20 ^{ns}	-.36**
PSKT	-.63**	-.47**	.21 ^{ns}	-.58**	-.27 ^{ns}	-.41**	-.37**	.13 ^{ns}	.33*	.47**	-.31*	.76**	.05 ^{ns}	.57**	-.40**	-.09 ^{ns}	-.44**
PAS	-.20 ^{ns}	-.27 ^{ns}	.14 ^{ns}	-.30*	-.44**	-.36**	-.13 ^{ns}	.27 ^{ns}	.38**	.23 ^{ns}	-.19 ^{ns}	.28 ^{ns}	.39**	.23 ^{ns}	-.41**	-.02 ^{ns}	-.35*
PB	-.27 ^{ns}	-.21 ^{ns}	.14 ^{ns}	-.13 ^{ns}	-.43**	-.21 ^{ns}	.04 ^{ns}	.27 ^{ns}	.44**	.50**	-.15 ^{ns}	.41**	.37**	.23 ^{ns}	-.28*	.02 ^{ns}	-.43**
PI	.45**	.35*	-.11 ^{ns}	.45**	.17 ^{ns}	.31*	.33*	.09 ^{ns}	.06 ^{ns}	.04 ^{ns}	.19 ^{ns}	-.27 ^{ns}	.24 ^{ns}	-.27 ^{ns}	.32*	.20 ^{ns}	.03 ^{ns}
PN	.19 ^{ns}	.27 ^{ns}	.01 ^{ns}	.19 ^{ns}	.02 ^{ns}	.20 ^{ns}	.28*	.08 ^{ns}	.27 ^{ns}	.23 ^{ns}	.22 ^{ns}	-.11 ^{ns}	.30*	.00 ^{ns}	.15 ^{ns}	-.03 ^{ns}	.03 ^{ns}
PEV	-.53**	-.55**	-.14 ^{ns}	-.62**	-.15 ^{ns}	-.60**	-.63**	.37**	.08 ^{ns}	.29*	-.27 ^{ns}	.80**	-.19 ^{ns}	.19 ^{ns}	-.29*	.13 ^{ns}	-.34*
PD	.01 ^{ns}	-.28*	-.49**	-.12 ^{ns}	-.09 ^{ns}	-.43**	-.46**	.56**	-.05 ^{ns}	.18 ^{ns}	-.05 ^{ns}	.37**	-.17 ^{ns}	-.48**	.13 ^{ns}	.53**	-.19 ^{ns}
POC	-.16 ^{ns}	.33*	-.16 ^{ns}	-.19 ^{ns}	.44**	.05 ^{ns}	-.13 ^{ns}	-.10 ^{ns}	.05 ^{ns}	-.02 ^{ns}	.22 ^{ns}	.25 ^{ns}	-.36*	.11 ^{ns}	.27 ^{ns}	-.20 ^{ns}	.09 ^{ns}
L	.51**	.66**	-.04 ^{ns}	.56**	.51**	.55**	.48**	-.42**	-.42**	-.48**	.31*	-.71**	-.22 ^{ns}	-.28*	.50**	-.22 ^{ns}	.52**
F	-.45**	-.42**	-.14 ^{ns}	-.54**	-.25 ^{ns}	-.48**	-.57**	.42**	.30*	.49**	-.13 ^{ns}	.77**	.00 ^{ns}	.20 ^{ns}	-.19 ^{ns}	.11 ^{ns}	-.35*
INC	-.25 ^{ns}	-.31*	-.13 ^{ns}	-.45**	-.02 ^{ns}	-.35 ^{ns}	-.38**	.30*	.17 ^{ns}	.32*	-.08 ^{ns}	.47**	.10 ^{ns}	.18 ^{ns}	-.03 ^{ns}	.04 ^{ns}	-.14 ^{ns}

Note. Statistically significant coefficients of $r > |.27|$ (which exceeds the level of statistical significance of $p = .05$) are evidenced in bold.

** = significant at $p < .01$ level.

* = significant at $p < .05$ level.

^{ns} = $p > .05$ level.

pertaining to schizoid (PSK) and schizotypal (PSKT) personality disorders showed significant negative correlations with SFERAS scales describing warmth (A), liveliness (F), narcissism, and (G_2), social boldness (H); there were significant positive correlations with SFERAS scales describing sensitivity (I) and guilt proneness (O).

On the whole, in the younger group, disorders related to Axes I and II appeared to be better differentiated than in group 2. Specifically, among older adults, TALEIA scale D (depression and dysthymia) and those scales referring to disorders with a depressive component (AL, eating disorders; and PB, borderline personality disorder) showed significant and positive correlations with SFERAS scales describing abstractedness (M) and guilt proneness (O). Two Axis I's TALEIA scales, depression (D) and eating disorders (AL), showed negative significant associations with SFERAS scales describing warmth (A), narcissism (G_2), and social boldness (H); scale D, in particular, was significantly and negatively correlated to SFERAS scales A (warmth), C (emotional stability), and F (liveliness). In group 1, TALEIA scales D and AL exhibited a pattern of significant correlations similar to that of the geriatric group. That is, there were negative correlations with SFERAS scales describing emotional stability (C), liveliness (F), and guilt proneness (O), plus negative correlations with SFERAS scales assessing openness to change (Q_1) and self-reliance (Q_2), as well as positive correlations with the scale describing sensitivity (I). On the opposite pole of mood disorders, as measured by TALEIA scale M (mania and hypomania), the geriatric group showed significant and positive correlations with SFERAS scales describing emotional stability (C), liveliness (F), narcissism (G_2), social boldness (H), and abstractedness (M). This pattern was similar to the one characterizing group 1, for which TALEIA M significantly and positively correlated with SFERAS scales describing dominance (E), liveliness (F), social boldness (H), vigilance (L), abstractedness (M), and tension (Q_4).

To specify, TALEIA, following the DSM-IV-TR and the ICD-10, includes various anxiety-related scales. Four of them refer to Axis I (AA, acute anxiety & panic disorder, AG, generalized anxiety, FO, phobias, and SOC, obsessive-compulsive syndrome), and three scales refer to Axis II (PEV, avoidant or anxious personality disorder, PD dependent personality disorder, and POC, obsessive-compulsive personality disorder). In the older group, all the above-mentioned scales, with the exception of the two related to an obsessive-compulsive component (SOC and POC), showed significant and negative correlations with SFERAS scales describing emotional stability (C), liveliness (F), narcissism (G_2), and social boldness (H). There were also significant positive correlations to SFERAS scales describing sensitivity (I), abstractedness (M), and guilt proneness (O). The two scales quantifying obsessive-compulsive symptomatology (SOC and POC) shared significant negative correlations only with narcissism (G_2) and social boldness (H), as well as significant positive correlations with guilt proneness (O). Group 1 shared a similar pattern with group 2, but with a few notable differences: (a) no significant correlations between TALEIA anxiety scales and SFERAS scale C (emotional stability); (b) significant correlations of such TALEIA scales with SFERAS scales describing openness to change (Q_1 , negative pole) and Q_2 (self reliance, negative pole - Group oriented); (c) substantial inclusion of SOC scores (obsessive-compulsive syndrome) in the whole group of the anxiety-related scales, while POC (obsessive-compulsive personality disorder) achieved somewhat peculiar results, showing positive significant correlations with SFERAS scales G_1 , describing super-Ego strength—rule consciousness, and with guilt proneness (SFERAS scale O), as well as significant negative correlations with scale F, quantifying liveliness.

DISCUSSION

The results of the MANOVA corroborated our hypothesis regarding significant age differences relative to scores on SFERAS (normal personality traits) and TALEIA's Axes I and II symptomatology. Such findings confirm prior empirical evidence (Boncori, 2007) and highlight the need to consider older respondents as a clinically distinct group from younger participants. Mean scores on normal and pathological features of personality were significantly different for the two age groups. Younger and older adults did not differ significantly on scales that quantify lively and outgoing social behaviors typical of histrionic or narcissistic personality disorder. Although, for the entire sample, all the mean TALEIA scores were nonpathological, older adults' scores on all TALEIA scales relative to Axis I (with the exception of manic symptomatology) were significantly higher in the pathological direction. This result is noteworthy, as it contradicts prior findings based on nonclinical samples from other areas of the world (e.g., empirical evidence on the general population of the U.S. on depression by Kessler et al., 2010, and of Chile on dysthymia by Kohn, Vicente, Saldivia, Rioseco, & Torres, 2008). Such a finding highlights the need for further research on subthreshold disorders with nonclinical older samples, in view of the earlier discussion of subthreshold conditions' multiple adverse outcomes. The empirically-supported general belief that mental health is better in older age is contradicted herein at a subthreshold level.

Concerning TALEIA's phobia scores, in contrast to Chilean findings on phobia (Kohn et al., 2008), we discovered that Italian older adults demonstrated higher scores than their younger counterparts on this clinical variable. Phobic symptomatology could be more pronounced in older age because older individuals often develop medical and/or cognitive difficulties and experience general declines in areas such as social recognition. All of this could adversely impact older adults' perceived competence level, with consequent anxious repercussions (as reported by researchers such as Flint & Rifat, 2002). Yet, this conjecture could not be verified herein. Moreover, SFERAS scores on anxiety-related scales demonstrated significant post-hoc age differences possibly due, at least partially, to a normal anxiety trait prevailing in older age. This finding suggests a tendency among Italian older adults toward exhibiting more socially withdrawn profiles than their younger counterpart; this, as mentioned below, was noticeable from an examination of TALEIA's profiles as well. This evidence highlights the need for careful assessment of subthreshold anxious symptomatology in older age.

Correlational analyses revealed a strong linear relationship among various scales and verified the first criterion for both age groups. The second criterion was also confirmed in the two age groups within three main areas: the schizophrenic spectrum, mood disorders, and anxiety disorders (although, in some cases, the correlation patterns were somewhat different for the two groups). Post-hoc age comparisons highlighted a withdrawn pattern of personality on the schizophrenic spectrum in more advanced age, similarly to the above-mentioned anxiety findings. This is a result of particular concern, as this pattern is related to cognitive decay and to a considerable prevalence of delirium in the hospitalized older population (Inouye, 2006). Differences in the correlation pattern between age groups underscore the need to further investigate schizophrenic symptomatology using a multidimensional perspective. Regarding depression and dysthymia, our findings showed a substantial continuity between normal personality traits and depressive symptomatology. Similarly, anxious symptomatology scores showed a pattern of correlations concerning normal personality traits and Axes I and II disorders (in both groups) supporting the

continuity hypothesis, with a few differences reinforcing the above-mentioned social withdrawing pattern found in the older group and underscoring the need for geriatric interventions to optimize social and reality contact.

This pilot research, like most preliminary studies, has multiple limitations that could be addressed in follow-up research. Among them is the fact that the younger group was comprised of both younger adults (30 subjects) and middle-aged ones (20 subjects). Also, even though our sample size exceeded the minimum criterion of the number of subjects in each cell being larger than the number of dependent variables (Tabachnick & Fidell, 2007), recruiting a bigger sample would have resulted in a more robust MANOVA. In similar prospective research with larger samples including younger, middle age, and older adults, the psychopathology continuum hypothesis could be tested further to include participants from the oldest-old category, i.e., people age 85 and older (as our oldest subject was, by pure coincidence, 84). Moreover, we used correlational analyses to test whether psychopathology existed along continua (consistent with the procedures typically adopted in pilot studies conducted on small samples). This choice represents another limitation of the present research, as correlational analyses are not the best way to determine whether categories or dimensions underlie a particular set of variables. Sample size limitations prevented us from utilizing more comprehensive ways to confirm the dimensionality tested herein, such as taxometric procedures (please see Meehl & Yonce, 1996, for an example, and Haslam, 2003, for a review of taxometric studies of psychopathology). Taxometric procedures would allow researchers to test taxonic (categorical) versus dimensional (continuous) latent structures of various forms of psychopathology (as done in the nongeriatric studies on dimensionality of psychopathology briefly reviewed in the early part of this paper).

Other limitations include the fact that, because our study was cross-sectional, its age-related findings could be attributed to cohort effects and other factors that were not controlled for. The design of this pilot investigation is problematic also due to the relatively unsystematic recruitment methods, which produced samples of young and old that differ substantially in education. Because of this, the age differences obtained could be explained by education, at least partially, and the particular structure of the associations achieved could depend on the characteristics of the two groups. Given the large difference in education between those groups, we were unable to verify whether the age differences in psychopathology reported herein are due to age or education. The differences could also be due to other variables such as the cultural context of Italy. Regarding cultural factors, our sample was culturally homogeneous; in the future, interested researchers should consider cultural issues in ethnic comparison studies, because southern and central Italian backgrounds (as opposed to northern Italian) might have played a considerable yet unexplored role in our findings.

Future longitudinal research with larger samples should be conducted keeping in mind the above-mentioned issues to confirm the generalizability of our results, as well as ascertain reasons for higher psychopathology scores among older adults as opposed to younger individuals. In future studies utilizing a dimensional approach, scholars could examine age differences among specific patterns of normal personality traits in younger versus older adults, ideally recruiting respondents from different ethnic backgrounds. It would also be interesting to apply a dimensional approach toward the identification of patterns of subsyndromal disorders specific to community-dwelling older adults in particular. These patterns hold potential to be significantly different from those of younger individuals (VanItallie, 2005), as older adults typically report more cognitive and somatic symptoms than affective symptomatology (Alexopoulos, 2004).

Yet, interestingly, in our study, they endorsed higher levels of affective symptomatology than younger adults; in particular, the fact that the older group was (among other findings) more guilt-prone and tense bears more study.

In sum, confirming our first hypothesis, we have gathered initial evidence that both normality- and psychopathology-related answers tend to differ in older age from those provided by younger individuals, with older, healthy Italian adults reporting overall higher levels of Axis I symptomatology (and some higher scores on normal personality traits) than younger adults. This contradicts prior evidence on this topic gathered from populations outside of Italy, and highlights the importance of focusing on subthreshold psychiatric conditions in older age. Regarding our second hypothesis, we have preliminarily confirmed the existence of continuity within our small sample between “normal” features of personality and disorders related to Axes I and II of the DSM-IV-TR (although future research using taxometric analysis on larger samples of adults and older adults is certainly needed to further verify this). To conclude, our findings offer some support for the following: (a) a view of psychopathology that is beyond internal cohesion of clinical presentation and beyond a standard pattern of psychopathology, in corroboration of the findings of prior researchers (e.g., Jablensky, 2005); (b) the notion that older adults’ often-complex clinical picture should be accurately assessed separately from that of younger adults using methods other than (or in addition to, as suggested by researchers such as Helzer, Kraemer, & Krueger, 2006) the classic categorical diagnostic system.

REFERENCES

- Abrams, R. C., & Horowitz, S. V. (1999). Personality disorders after age 50: A meta-analytic review of the literature. In W. Rosowsky, R. C. Abrams & R. A. Zweig (Eds.), *Personality disorders in older adults: Emerging issues in diagnosis and treatment* (pp. 55–68). Mahwah, NJ: Lawrence Erlbaum.
- Abrams, R. C., Spielman, L., Alexopoulos, G. S., & Klausner, E. (1998). Personality disorder symptoms and functioning in elderly depressed patients. *American Journal of Geriatric Psychiatry*, 6(1), 24–30.
- Alexopoulos, G. S. (2004). *Late life depression*. Oxford, UK: Oxford University.
- Alexopoulos, G. S. (2005). Depression in the elderly. *Lancet*, 365(9475), 1961–1970.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Amore, M., Tagariello, P., Laterza, C., & Savoia, E. M. (2007). Beyond nosography of depression in elderly. *Archives of Gerontology and Geriatrics*, 44(1), 13–22.
- Bernacchio, C., McReynolds, C., Falvo, D., Stevens, J., Cimera, R., & Hogan, E. (2009). Psychosocial characteristics of aging persons with psychiatric disabilities seeking VR. *Journal of Applied Rehabilitation Counseling*, 40(2), 5–12.
- Boncori, L. (2007). TALEIA-400A. *Test for axial evaluation and interview for clinical, personnel, and guidance applications*. Trento, Italy: Erickson.
- Boncori, L. (2012). *A pilot study on the validation of SFERAS*. Manuscript in preparation.
- Boncori, L., & Barruffi, A. (2004). *SFERAS, sedici fattori esplorati relativamente a situazioni*. Manuale [SFERAS, sixteen factors explored relatively to situations. Manual]. Rome, Italy: CRISP. <http://www.boncoritest.it>.
- Butcher, J. N., Dahlstrom, W. G., Graham, J. R., Tellegen, A., & Kaemmer, B. (1989). *MMPI-2: Manual for administration and scoring*. Minneapolis: University of Minnesota Press.
- Canuto, A., Giannakopoulos, P., Meiler-Mititelu, C., Delaloye, C., Herrman, F. R., & Weber, K. (2009). Personality traits influence clinical outcome in day hospital-treated elderly depressed patients. *The American Journal of Geriatric Psychiatry*, 17(4), 335–343.
- Cattell, R. B. (1979). *Personality and learning theory, Vol. 1: The structure of personality in its environment*. New York, NY: Springer.
- Conwell, Y., Duberstein, P. R., Hermann, J. H., & Caine, E. D. (1996). Relationship of age and axis I diagnoses in victims of completed suicide: A psychological autopsy study. *American Journal of Psychiatry*, 153, 1001–1008.

- Dalle Carbonare, L., Maggi, S., Noale, M., Giannini, S., Rozzini, R., Lo Cascio, V., & Crepaldi, G. (2009). Physical disability and depressive symptomatology in an elderly population: A complex relationship. The Italian longitudinal study on aging (ILSA). *American Journal of Geriatric Psychiatry, 17*(2), 144–154.
- Djernes, J. K. (2006). Prevalence and predictors of depression in populations of elderly: A review. *Acta Psychiatrica Scandinavica, 113*(5), 372–387.
- Erskine, J. A.K., Kvavilashvili, L., Conway, M. A., & Myers, L. (2007). The effects of age on psychopathology, well-being and repressive coping. *Aging & Mental Health, 11*(4), 394–404.
- Flint, A. J., & Rifat, S. L. (2002). Relationship between clinical variables and symptomatic anxiety in late-life depression. *The American Journal of Geriatric Psychiatry, 10*(3), 292–296.
- George, L. K., Blazer, D. F., Winfield-Laird, I., Leaf, P. J., & Fischback, R. L. (1988). Psychiatric disorders and mental health service use in later life: Evidence from the epidemiological catchment area program. In J. Brody & G. Maddox (Eds.), *Epidemiology and aging* (pp. 189–219). New York, NY: Springer.
- Gournellis, R., Oulis, P., Michalopoulou, P., Kaparoudaki, A., Dimitrakopoulos, C., & Lykouras, L. (2009). Dimensional approach to delusions in psychotic depression in the elderly: Factor structure and clinical correlates. *International Journal of Geriatric Psychiatry, 24*, 363–368.
- Hanel, G., Henningsen, P., Herzog, W., Sauer, N., Schaefer, R., Szecsenyi, J., & Löwe, B. (2009). Depression, anxiety, and somatoform disorders: Vague or distinct categories in primary care? Results from a large cross-sectional study. *Journal of Psychosomatic Research, 67*, 189–197.
- Haslam, N. (2003). Categorical versus dimensional models of mental disorder: The taxometric evidence. *Australian and New Zealand Journal of Psychiatry, 37*(6), 696–704.
- Haslam, N., Williams, B. J., Kyrios, M., McKay, D., & Taylor, S. (2005). Subtyping obsessive-compulsive disorder: A taxometric analysis. *Behavior Therapy, 36*(4), 381–391.
- Hathaway, S. R., & McKinley, J. C. (1943). *The Minnesota multiphasic personality inventory*. New York, NY: The Psychological Corporation.
- Helzer, J. E., Kraemer, H. C., & Krueger, R. F. (2006). The feasibility and need for dimensional psychiatric diagnoses. *Psychological Medicine, 36*, 1671–1680.
- Hybels, C. F., Pieper, C. F., & Blazer, D. G. (2009). The complex relationship between depressive symptoms and functional limitations in community-dwelling older adults: The impact of subthreshold depression. *Psychological Medicine, 39*, 1677–1688.
- Inouye, S. K. (2006). Delirium in older persons. *New England Journal of Medicine, 354*, 1157–1165.
- Jablensky, A. (2005). Categories, dimensions and prototypes: Critical issues for psychiatric classification. *Psychopathology, 38*(4), 201–205.
- Karlsson, B., Klenfeldt, F., Sigström, R., Waern, M., Östling, S., Gustafson, D., & Skoog, I. (2009). Prevalence of social phobia in non-demented elderly from a Swedish population study. *The American Journal of Geriatric Psychiatry, 17*(2), 127–135.
- Kessler, R. C., Bimbaum, H., Bromet, E., Hwang, I., Sampson, N., & Shahly, V. (2010). Age differences in major depression: Results from the national comorbidity survey replication (NCS-R). *Psychological Medicine, 40*, 225–237.
- Kohn, R., Vicente, B., Saldivia, S., Rioseco, P., & Torres, S. (2008). Psychiatric epidemiology of the elderly population in Chile. *The American Journal of Geriatric Psychiatry, 16*(12), 1020–1028.
- Krasucki, C., Howard, R., & Mann, A. (1998). The relationship between anxiety disorders and age. *International Journal of Geriatric Psychiatry, 13*, 79–99.
- Laganà, L., & Boncori, L. (2012). *The preliminary validation of the English version of TALEIA-400*. Manuscript in preparation.
- Lyness, J. M., Heo, M., Datto, C. J., Ten Have, T. R., Katz, I. R., Drayer, . . . Bruce, M. (2006). Outcomes of minor and subsyndromal depression among elderly patients in primary care settings. *Annals of International Medicine, 144*, 496–504.
- Meehl, P. E., & Yonce, L. J. (1996). Taxometric analysis: II. Detecting taxonicity using covariance of two quantitative indicators in successive intervals of a third indicator (MAXCOV procedure). *Psychological Reports, 78*, 1091–1227.
- National Institute of Mental Health. (2009). *Older adults and mental health: Depression is not a normal part of aging*. Retrieved from <http://www.nimh.nih.gov/health/topics/older-adults-and-mental-health/index.shtml>
- Nuevo, R. N., Ruiz, M. A., Izal, M., Montorio, I., Losada, A., & Márquez-González, M. (2008). A comparison of the factorial structure of DSM-IV criteria for generalized anxiety disorder between younger and older adults. *Journal of Psychopathology and Behavioral Assessment, 30*(4), 252–260.

- Porensky, E. K., Dew, M. A., Karp, J. F., Skidmore, E., Rollman, B. L., Shear, M. K., & Lenze, E. R. (2009). The burden of late-life generalized anxiety disorder: Effects on disability, health-related quality of life, and healthcare utilization. *The American Journal of Geriatric Psychiatry, 17*(6), 473–482.
- Ruscio, A. M., Ruscio, J., & Keane, T. M. (2002). The latent structure of posttraumatic stress disorder: A taxometric investigation of reactions to extreme stress. *Journal of Abnormal Psychology, 111*(2), 290–301.
- Schoevers, R. A., Deeg, D. J. H., van Tilburg, W., & Beekman, A. T. F. (2005). Depression and generalized anxiety disorder: Co-occurrence and longitudinal patterns in elderly patients. *The American Journal of Geriatric Psychiatry, 13*(1), 31–39.
- Slade, T., & Andrews, G. (2004). Latent structure of depression in a community sample: A taxometric analysis. *Psychological Medicine, 35*, 489–497.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon.
- Tatsuoka, M. M. (1988). *Multivariate analysis* (2nd ed.). New York, NY: Macmillan.
- Trollor, J. N., Anderson, T. M., Sachdev, P. S., Brodaty, H., & Andrews, G. (2007). Prevalence of mental disorders in the elderly: The Australian national mental health and well-being survey. *The American Journal of Geriatric Psychiatry, 15*(6), 455–466.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general*. Rockville, MD: Author.
- Vahia, I. V., Meeks, T. W., Thompson, W. K., Depp, C. A., Zisook, S., Allison, M., . . . Jeste, D. V. (2010). Subthreshold depression and successful aging in older women. *The American Journal of Geriatric Psychiatry, 18*(3), 212–218.
- VanItallie, T. B. (2005). Subsyndromal depression in the elderly: Underdiagnosed and under-treated. *Metabolism Clinical and Experimental, 54*(1), 39–44.
- van Zelst, W. H., de Beurs, E., Beekman, A. T. F., van Dyck, R., & Deeg, D. D. H. (2006). Well-being, physical functioning, and use of health services in the elderly with PTSD and subthreshold PTSD. *International Journal of Geriatric Psychiatry, 21*, 180–188.
- Wiktorsson, S., Runeson, B., Skoog, I., Östling, S., & Waern, M. (2010). Attempted suicide in the elderly: Characteristics of suicide attempters 70 years and older and a general population comparison group. *The American Journal of Geriatric Psychiatry, 18*(1), 57–67.
- Zweig, R. A., & Hillman, J. (1999). Personality disorders in adults: A review. In W. Rosowsky, R. C. Abrams & R. A. Zweig (Eds.), *Personality disorders in older adults: Emerging issues in diagnosis and treatment* (pp. 31–53). Mahwah, NJ: Lawrence Erlbaum.