

EDITED BY

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# **New Directions in Organizational Psychology and Behavioral Medicine**

**PSYCHOLOGICAL AND BEHAVIOURAL ASPECTS OF RISK**

# New Directions in Organizational Psychology and Behavioral Medicine

*Edited by*

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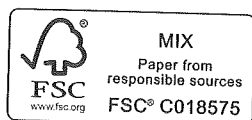
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# Mental Health and Unemployment: The Coping Perspective

*Alexander-Stamatios Antoniou and Marina Dalla*

According to the International Labour Organisation (2007) unemployment covers people who: are out of work; want a job; have actively sought work in the previous four weeks and are available to start work within the next fortnight; or are out of work and have accepted a job that they are waiting to start in the next fortnight. In most European countries, the unemployment rate has increased in the past 30 years, affecting mainly young people and women (Organization for Economic Cooperation and Development, 2009). Increasing globalization and world-wide economic competition have been accompanied by high unemployment rates (Ukperere and Slabbert, 2009).

According to deprivation perspectives (Jahoda, 1982), unemployment or job loss results in a significant deterioration in mental health (Catalano, Raymond, and William, 2002; Dooley, Prause, and Ham-Rowbottom, 2000) as a state of social, emotional and spiritual well-being that provides individuals with the vitality necessary for active living, to achieve goals, and to interact with others in ways that are respectful and just (VicHealth, 1999). The main argument of this theory is that unemployment deprives people of the latent functions of work in their lives: time structure, social contact and participation, status and identity, as well as shared experiences outside the family (Jahoda, 1982). Similarly, Halvorsen (2004) argues that unemployment results in cumulative disadvantages, because of income loss and lower living standards, loss of self-esteem, and an increased risk of poorer mental health.

# Mental Health and Unemployment: The Coping Perspective

*Alexander-Stamatios Antoniou and Marina Dalla*

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There is evidence from different countries and time periods that unemployed people have poor psychological health. They suffer from psychosomatic symptoms, anxiety, depression, social dysfunction, reduced happiness, and behavioral problems (Layard, 2005; MacDonald and Shields, 2001; Rodríguez, Frongillo, and Chandra, 2001). Furthermore, unemployed people have a low sense of status and less involvement in social activities, both of which have a negative effect on their psychological health (Waters and Moore, 2002).

However, the relationship between unemployment and well-being does not appear to be linear. According to research, women are less affected by unemployment than men (Waters and Moore, 2002) as a consequence of traditional gender roles that provide some time structure, status, and activity that may compensate for some of the negative effects of unemployment (Artazcoz, Benach, Borrell, and Cortes, 2004; Jahoda, 1982). Furthermore, in many countries, women are considered as the second earner in the household (Georgas, 1989). Likewise, young people experience fewer psychological problems than older people, because they can establish functional alternatives to work and, moreover, they place less value on social position than older persons (Zunker, 1998).

In addition to deprivation theory that attempts to explain the effects of unemployment on well-being, more recent approaches offer a contrasting view of unemployment. The incentive perspective emphasizes that unemployment is a deliberate choice of the unemployed because of weak motivation to search for a job (Goul Andersen, 2001). The proponents of this theory suggest that a notable part of unemployment is more or less voluntary, and that the problem among the unemployed is that their well-being may be too high, rather than too low. According to this view, the behavior of the unemployed can and should be motivated by financial and non-financial incentives that help people to develop and use their full productive capacities.

The key concepts of the deprivation paradigm and the incentive approach have recently been combined in the coping theory (Halvorsen, 1994 in Goul Andersen, 2001). According to this perspective, unemployment is a serious psychosocial problem because it deprives people of latent and manifest benefits. However, a notable number of unemployed people have the resources to cope with the situation. From this perspective, psychological resources are assumed to be an important precondition for well-being among unemployed people. Psychological resources include a person's perception of self, attitudes towards work, ethical orientation and general outlook in life that represent one's core

self evaluations, and one's appraisal of people, events, and things in relation to oneself (Erez and Judge, 2001). Emotional stability and conscientiousness seem to be important resources because careful, responsible, organized, achievement-oriented, and hardworking individuals with low neuroticism are expected to have a high probability of entering employment (Barrick and Mount, 1991). Other psychological traits such as extraversion, agreeableness, and openness to experience are more essential for a job requiring greater interaction or cooperation with others.

Emotion regulation is also an important determinant of well-being (Phillips, Henry, Hosie, and Milne, 2006). Therefore, in evaluating psychological well-being it is important to study anger as one of the most frequently experienced negative emotions (Spielberger, Moscoso, and Brunner, 2005). In terms of social outcomes anger is associated with social maladjustment, especially anger expression within social relationships (Lazarus, 1996). Careful assessment of the experience, expression, and control of anger is essential for understanding problems that are rooted in anger as well as for improving mental and physical health by using adaptive strategies in different situations (Spielberger, Reheiser, Ritterband, Sydeman, and Unger, 1995).

Studying personal and work values and interests, we can understand a person's motivation to engage in job searching to facilitate reemployment. Personal values have been conceptualized as cognitive representations of universal needs (Schwartz, 1996), as enduring states of proper social behavior (Rokeach, 1973), as guiding principles in life, or as part of one's personality affecting goal-oriented behavior and decision making (Schwartz, 1996). Value theory specifies four main dimensions of contrasting values: openness to change values (self-direction, stimulation) which encourage independence of thought, feeling, and action conflicts; conservation values (conformity, tradition, security) that call for self restriction, preserving traditional practices, and protecting stability; self-transcendence values (universalism, benevolence) emphasize the acceptance of others as equals and concern for their welfare conflict; and self-enhancement values (power, achievement) encourage pursuing one's own relative success and dominance over others. Hedonism as a value, then, is seen as sharing elements of openness and self-enhancement. Furthermore, while some studies conclude that self-direction, achievement, and stimulation are positively associated with positive affects, security, conformity, and tradition values are negatively associated (Roccas, Sagiv, Schwartz, and Knafo, 2002).

Work-related values as expressions of more general life values have been defined as goals, or characteristics that can be found in a job (International Research Team, 1987). Work values cover different aspects of work such as creativity, intellectual stimulation, independence, group orientation, prestige, and security (Super, 1995), and after validation in different countries they reflect intrinsic (intellectual stimulation, creativity, and independence) and extrinsic (social orientation, prestige, and security) motivation (Elizur, Borg, Hunt, and Beck, 1991). Intrinsic motivation reflects engaging in an activity simply because it is interesting and enjoyable on its own, while the reasons for extrinsic motivation are different opportunities, separate outcomes, or rewards (Deci and Ryan, 2002). Career interests as likes and dislikes regarding specific activities or objects (Greenhaus, Callanan, and Godshalk, 2000) influence all other aspects of life.

Observing personal and work values in the context of economic change helps people to be more realistic and effective in searching for a new job (Zunker, 2002). Furthermore, values and interests are assumed to be linked to the motivation and the affective system. Some unemployed people might perceive employment as an attractive and personal goal; hence, their behavior is regulated by intrinsic motivation. Others engage in job searching behavior as an opportunity to solve their financial problems; hence, their behavior is characterized by an external perceived motivation. Unemployed people with high external motivation tend to experience job loss as stressful and pressuring, thereby reflecting negative psychological well-being (Vansteenkiste, Lens, Dewitte, DeWitte, and Deci, 2004).

Support for the study of the well-being and other psychological resources of unemployed people comes from developmental training programs. Such programs seek to reduce the negative effects of unemployment on the well-being of unemployed and to improve their basic coping skills for managing transition. One set of skills is related to internal psychological resources and personal strengths which in turn affect motivation and reduce emotional and psychological distress, anger and anxiety, hostile and aggressive behavior (Zunker, 2002). Furthermore, people may analyze discrepancies between existing and desired conditions, identify stressful situations related to implementing goals, and adopt additional skills which facilitate their reentry into employment.

The purpose of this study was to examine the well-being of unemployed people participating in programs which support their technical and vocational



training. Usually, the impact of unemployment on well-being is measured by psychological distress, mental health, and satisfaction (Whelan and McGinnity, 2000). We examined a number of aspects of well-being including psychosomatic symptoms, anxiety/insomnia, social dysfunction, severe depression and state and trait anxiety. The aims of this study are: 1) to assess the well-being of unemployed participants, 2) to examine whether there are any gender and age differences in aspects of well-being, and 3) to test if psychological factors (personality traits and state and trait anger) and the personal system of interests and values are related to the well-being of the unemployed. The traditional deprivation perspective is concerned with negative effects of unemployment, while the coping perspective can provide a useful framework when dealing with resources that facilitate re-employment.

To summarize, we expected unemployed people to experience a low degree of well-being following the loss of a job, although earlier results regarding the connection between unemployment and mental health are mixed (Nyman, 2002). Furthermore, we expected that unemployed women would have higher well-being than men, due to their traditional lifestyle. Women are more "homemaker" oriented than men and they place as much or more emphasis on the home as a job (Zunker, 2002). We also expected that unemployment would exert relatively less negative effect (higher well-being) on younger persons than upon older persons.

Finally, following this conceptualization of coping perspective, we examined the relation of personality traits, anger experience, and the personal system of values and work interests to the well-being of the unemployed (psychosomatic symptoms, anxiety/insomnia, social dysfunction, severe depression and state and trait anxiety). We expected emotional stability and conscientiousness to predict positive well-being because people with low neuroticism and high achievement orientation are more likely to engage in job searching (Barrick and Mount, 1991). Extrinsic values were expected to be a positive predictor of negative well-being, because unemployed people with high extrinsic motivation are likely to experience their job search as stressful and harmful for their psychological well-being (Vansteenkiste, Lens, Dewitte, DeWitte, and Deci, 2004).

## Method

### PARTICIPANTS

The sample comprised 259 people, all of whom were unemployed according to the registration criteria, at the time of vocational training programs offered in the wider region of Athens. There were 61 (23.6%) males and 198 (76.4%) females. Over 28.3% (73) of participants were within the age range of 18 to 25 years, 52.5% (135) were within the range 26–45 years, and 19.4% within the range 46–64 years. There was one missing value with regard to age. All participants were recruited from Vocational Training Centers in the area of Athens.

## Measures

### WELL-BEING

Well-being was measured using two questionnaires: the General Health Questionnaire (GHQ) (Goldberg and Williams, 1988) and the State-Trait Anxiety Inventory for Adults (STAI) (Spielberger et al., 1995).

- The GHQ-28 (Goldberg and Williams, 1988) asks respondents to describe the level of their recent psychological state in relation to somatic symptoms, anxiety/insomnia, social dysfunction, and severe depression respectively. Responses are provided on a four-point scale: 1: not at all, 2: no more than usual, 3: rather more than usual, 4: much more than usual. The coefficient alphas were: for the Total Score 0.93; for Somatic Symptoms 0.80; for Anxiety and Insomnia 0.97; for Social Dysfunction 0.97; and for Severe Depression 0.97. The total scale score ranges from 28 to 112 and the higher the score the poorer the psychological well-being of the respondents. Subjects were classified as high and low on each of the measures respectively, using the Ward method.
- STAI (Spielberger et al., 1995) provides separate measures of state and trait anxiety using 40 questions. The "state anxiety" (questions 1–20) is a measure of the intensity of anxiety experienced at the time of assessment, while "trait anxiety" (questions 21–40) evaluates stable differences between people in their tendency to perceive a wider range of situations as threatening and in their disposition

to experience intense elevations of state anxiety in such situations (Spielberger et al., 2005). The coefficient alphas were: for the Total Score 0.90; for Trait Anxiety 0.80; and for State Anxiety 0.91. Total scores range from a minimum of 20 to a maximum of 80 for trait and state anxiety with higher scores indicating more severe anxiety symptoms. Subjects were classified as high and low on state and trait anxiety respectively, using the Ward method.

## PERSONALITY VARIABLES

- Personality traits were measured using a short version of the Adjective Check List–Five Factors (ACL-FF) (Williams, Satterwhite, and Saiz, 1998). The instrument measures neuroticism (N) ( $\alpha = 0.70$ ), extraversion (E) ( $\alpha = 0.60$ ), openness to experience (O) ( $\alpha = 0.60$ ), agreeableness (A) ( $\alpha = 0.74$ ), and conscientiousness (C) ( $\alpha = 0.77$ ). Each scale has six items, and responses are scored on a seven-point rating scale, ranging from “not at all” to “very much.”
- The State-Trait Anger Expression Inventory (STAXI-2) (Spielberger, 1988) includes seven independent subscales: State Anger (15 items), Trait Anger (10 items), Anger-in (8 items), Anger-out (8 items), and two anger control factors, Anger/Control-in (8 items) and Anger/Control-out (8 items). State anger ( $\alpha = 0.95$ ) evaluates the level of anger experienced at the time of testing, while Trait anger ( $\alpha = 0.87$ ) measures the general tendency of a person to get angry. The internal expression of anger (Anger-in) ( $\alpha = 0.65$ ) indicates that angry feelings are held in or suppressed, while Anger-out ( $\alpha = 0.64$ ) reflects the outward expression of angry feelings, verbally or via physical aggression towards other people or towards objects in the person’s environment. The external control of anger (Anger Control-out) ( $\alpha = 0.85$ ) focuses on anger control by relaxation and calming strategies, and, finally, the internal control of anger (Anger Control-in) ( $\alpha = 0.84$ ) refers to an individual’s attempts to control the outward expression of angry feelings. Higher scores on all scales (from one to four) indicate a greater experience of anger and propensity to experience it and a greater tendency to control and to express anger.

## THE SYSTEM OF PERSONAL VALUES, INTEREST TYPES AND WORK VALUES

### *Personal values*

The Schwartz Values Survey (Schwartz 1996) was used to determine a system of four types of higher-order values: openness-to-change (self-direction,  $\alpha = 0.94$ , stimulation,  $\alpha = 0.94$ ), conservation (conformity,  $\alpha = 0.92$ , security,  $\alpha = 0.97$ , tradition,  $\alpha = 0.97$ ), self-enhancement (achievement,  $\alpha = 0.96$ , hedonism,  $\alpha = 0.95$ , power,  $\alpha = 0.86$ ), and self transcendence (benevolence,  $\alpha = 0.62$ , universalism,  $\alpha = 0.68$ ). Openness-to-change values relate to the importance of personal autonomy and independence, variety, excitement, and challenge. Conservation values relate to the importance of self-control, safety, and stability in societal and personal relationships, and respecting cultural traditions. Self-enhancement values relate to achieving personal success through demonstrated competence, attaining social status and prestige, and control over others. Self-transcendence values relate to protecting and enhancing the well-being of those with whom one has close contact, as well as the welfare of all people and nature.

### *Vocational interests*

The Vocational Interests Inventory for Adults was used (Holland, Reardon, Latshaw, Rarick, Schneider, Shortridge, and James, 2001) to study six dimensions or interest types. Realistic individuals enjoy working with mechanical devices and working outdoors using machines, tools and objects ( $\alpha = 0.86$ ). Investigative individuals enjoy scientific pursuits, working with abstract ideas, researching and analyzing ( $\alpha = 0.89$ ). Artistic individuals value aesthetics, using their imagination and creativity ( $\alpha = 0.84$ ). Social individuals value service to others and enjoy teaching, helping, and working with people ( $\alpha = 0.86$ ). Enterprising individuals value status and enjoy directing, organizing, and leading ( $\alpha = 0.89$ ). Conventional individuals prefer structured tasks, enjoy practical pursuits and working with things, numbers, or machines to meet precise standards ( $\alpha = 0.89$ ). Vocational interests types were measured using 48-items on a five-point Likert scale (1 = "strongly disinterested"; 5 = "strongly interested").

### *Work values*

Based upon the categorization of values proposed by Super (1995), we used a Work Value Inventory, focused on six basic types of work values: 1) intellectual stimulation ( $\alpha = 0.76$ ), which is associated with work that provides opportunity for independent thinking and learning how and why things work; 2) creativity

( $\alpha = 0.65$ ), associated with work that permits individuals to invent new things, design new products or develop new ideas; 3) independence ( $\alpha = 0.63$ ), which permits individuals to work in their own way, doing what they want according to their level of achievement and direction; 4) group orientation ( $\alpha = 0.72$ ), associated with work that brings people into contact with fellow workers whom they like; 5) prestige ( $\alpha = 0.75$ ), associated with work that gives people standing in the eyes of others and evokes respect; and 6) security ( $\alpha = 0.60$ ), associated with work that provides people with the certainty of having a job, even in hard times. The Work Value Inventory consists of 38 items rated on a five-point Likert scale ranging from "not well at all" to "very well."

This study used the Greek versions of all instruments, which were provided by different authors (Antoniou and Dalla, 2008; Besevegis, Dalla, Gari, and Karademas, 2008; Stalikas, Triliva, and Roussi, 2002).

## Results

### WELL-BEING OF PARTICIPANTS

The first stage was to use Ward's method to evaluate the distances between people with high and low levels of general health and anxiety. The next step was to test the mean differences between the two groups: high versus low scores on the GHQ-28 and STAI, according to gender and age. One-way Anovas showed significant differences in all variables: Somatic Symptoms  $F(1, 258) = 361.27$ ,  $p < 0.001$ , Anxiety and Insomnia  $F(1, 258) = 147.43$ ,  $p < 0.001$ , Social Dysfunction  $F(1, 258) = 190.34$ ,  $p < 0.001$ , Severe Depression  $F(1, 258) = 463.662$ ,  $p < 0.001$ , Total GHQ-28  $F(1, 258) = 239.560$ ,  $p < 0.001$ ; State Anxiety  $F(1, 258) = 503.08$ ,  $p < 0.001$ , and Trait Anxiety  $F(1, 258) = 487.60$ ,  $p < 0.001$ .

Means and standard deviations of low and high scores of GHQ-28 and STAI according to Ward analysis are presented in Table 17.1.

The following results (see Table 17.2) reflect crosstab analyses for the samples with low and high scores on GHQ-28 and STAI according to gender. The number of people who experienced high level of general health problems was 37 (7 males and 30 females). The group with the highest somatic symptoms consists of 37 people (7 males and 30 females), while 150 people (30 males and 120 females) experienced high level of anxiety and insomnia, 165 (44 males and 121 females) high social dysfunction, and high levels of severe depression were experienced by

**Table 17.1** Means and standard deviation of low and high scores of GHQ-28 and STAI according to Ward analysis

	Low		High		Total	
	M	SD	M	SD	M	SD
<b>GHQ-28</b>						
Somatic Symptoms	9.81	2.40	17.97	2.52	10.98	3.74
Anxiety and Insomnia	8.22	1.85	14.29	3.21	11.74	4.05
Social Dysfunction	9.46	2.20	14.24	2.69	12.51	3.41
Severe Depression	7.25	1.21	14.30	4.01	9.10	3.88
Total GHQ-28	41.04	8.77	64.03	13.85	44.32	11.55
<b>STAI</b>						
State Anxiety	29.32	7.46	52.51	7.75	36.03	12.95
Trait Anxiety	29.43	6.30	48.34	7.46	37.68	11.61

**Table 17.2** Participants with low and high scores of GHQ-28 and STAI according to Crosstab analysis

	Male				Female			
	Low		High		Low		High	
	f	%	f	%	f	%	f	%
<b>GHQ-28</b>								
Somatic Symptoms	54	88.5	7	11.5	168	84.8	30	14.3
Anxiety and Insomnia	31	50.8	30	49.2	78	71.6	120	60.6
Social Dysfunction	17	27.9	44	72.1	77	38.9	121	61.1
Severe Depression	43	70.5	18	29.5	148	74.7	50	25.3
Total GHQ-28	54	88.5	7	11.5	168	84.5	30	15.2
<b>STAI</b>								
State Anxiety	40	65.6	21	34.4	144	72.7	54	27.3
Trait Anxiety	42	68.9	19	31.1	104	52.5	94	47.5

68 people (18 males and 50 females). Regarding STAI, people reporting high state anxiety amounted to 75 (21 males and 54 females) and 113 participants (19 males and 94 females) experienced high trait anxiety. There were significantly more females than males experiencing high trait anxiety  $\chi^2(1, n = 239) = 5.04, p < 0.05$ . There were no differences for scores on the GHQ-28 and STAI related to age.

**AGE AND GENDER DIFFERENCES ON PERSONALITY AND ANGER EXPRESSION VARIABLES**

*Personality traits*

Only neuroticism differentiated between men and women  $F(1, 254) = 4.90, p < 0.05, \eta^2 = 1.9\%$ . Women seemed to be more nervous and emotional than men. Age was not significant for any of the personality variables (see Table 17.3).

**Table 17.3 Means of personality and anger expression variables as a function of age and gender**

	Age					Gender			
	18-25	26-45	46-64	F	$\eta^2$	Male		Female	
	M.	M.	M.			M.	M.	F	$\eta^2$
<b>Check List-Five Factors Personality</b>									
Neuroticism	3.02	3.02	2.81	0.68	0.005	2.79	3.12	4.90*	0.019
Extraversion	4.73	4.65	4.62	2.37	0.019	4.62	4.71	0.77	0.003
Openness	4.52	4.49	4.33	0.37	0.003	4.55	4.34	1.79	0.007
Agreeableness	5.49	5.34	5.78	0.13	0.001	5.45	5.61	0.26	0.001
Conscientiousness	5.58	5.38	5.97	3.45	0.027	5.52	5.78	1.96	0.008
<b>State-Trait Anger Expression Inventory</b>									
State Anger	1.26	1.30	1.13	2.40	0.019	1.32	1.21	1.61	0.006
Trait Anger	1.78	1.88	1.73	2.30	0.018	1.80	1.80	0.02	0.000
Anger-in	2.05	2.17	2.10	2.10	0.016	2.03	2.13	1.27	0.005
Anger-out	1.88	1.86	1.82	0.24	0.002	1.83	1.87	0.23	0.001
Control-in	1.93	1.94	1.91	0.78	0.006	1.92	1.93	0.06	0.000
Control-out	2.73	2.73	2.82	0.10	0.001	2.67	2.77	0.69	0.003

Note: \*  $p < 0.05$ .

### State-trait anger expression inventory

There were no age or gender differences for State-Trait Inventory variables (see Table 17.3).

### AGE AND GENDER DIFFERENCES ON PERSONAL VALUES

#### Personal values

Age of participants had a significant effect on preferred personal values (see Table 17.4). Young respondents (18–25 years) were more likely to believe in self direction  $F(2, 257) = 6.35, p < 0.01, \eta^2 = 4.8\%$ , stimulation  $F(2, 257) = 11.3, p < 0.001, \eta^2 = 8.2\%$ , achievement  $F(2, 257) = 7.23, p < 0.01, \eta^2 = 5.4\%$ , hedonism  $F(2, 257) = 6.82, p < 0.01, \eta^2 = 4.8\%$ , conformity  $F(2, 257) = 6.68, p < 0.01, \eta^2 = 5\%$ , and power  $F(2, 257) = 2.98, p < 0.05, \eta^2 = 2.3\%$ . Young (18–25) and older people (46–64) rated higher than people within the age range 26–46 years on security  $F(2, 257) = 7.44, p < 0.01, \eta^2 = 5.6\%$ , tradition  $F(2, 257) = 8.31, p < 0.001, \eta^2 = 6.2\%$ , benevolence  $F(2, 257) = 8.43, p < 0.01, \eta^2 = 6.3\%$ , and universalism  $F(2, 257) = 4.68, p < 0.01, \eta^2 = 3.6\%$ . There were also significant gender differences for stimulation  $F(1, 257) = 6.99,$

**Table 17.4** Means of personal value variables as a function of age and gender

	Age					Gender			
	18–25	26–45	46–64	F	$\eta^2$	Male	Female	F	$\eta^2$
	M.	M.	M.			M.	M.		
Self-direction	4.14a	2.95b	3.41b	6.35**	0.048	3.78	3.45	1.46	0.006
Stimulation	3.88a	2.52b	2.58b	11.3***	0.082	3.54	2.85	6.99**	0.027
Conformity	4.34a	3.16b	3.79 ab	6.68**	0.050	3.99	3.71	0.32	0.004
Security	4.48a	3.25b	4.12a	7.44**	0.056	4.06	3.93	0.67	0.001
Tradition	4.21a	3.05b	3.97a	8.31***	0.062	3.76	3.74	0.01	0.000
Achievement	4.08a	2.91b	3.41b	7.23**	0.054	3.67	3.42	0.87	0.003
Hedonism	4.34a	3.13b	3.61b	6.82**	0.048	3.92	3.65	0.09	0.004
Power	2.85a	2.07b	2.20b	2.98*	0.023	2.81	2.26	4.81*	0.019
Benevolence	4.37a	3.18b	4.07a	8.43***	0.063	3.98	3.85	0.22	0.001
Universalism	3.04a	3.84b	3.04a	4.68**	0.036	3.73	3.56	0.36	0.001

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .



$p < 0.01$ ,  $\eta^2 = 2.7\%$ , and power  $F(1, 257) = 4.81$ ,  $p < 0.05$ ,  $\eta^2 = 1.9\%$ , values. Men were more likely than women to believe in stimulation and power (see Table 17.4).

AGE AND GENDER DIFFERENCES ON INTEREST TYPES AND WORK VALUES

*Interest types*

Young respondents compared to older people are much more focused on activities that relate to realistic  $F(2, 257) = 3.79$ ,  $p < 0.05$ ,  $\eta^2 = 2.9\%$ , investigative  $F(2, 257) = 3.88$ ,  $p < 0.05$ ,  $\eta^2 = 3.0\%$ , and enterprising  $F(2, 257) = 5.01$ ,  $p < 0.01$ ,  $\eta^2 = 3.8\%$  occupations. Men rated higher than women on realistic occupations  $F(1, 257) = 7.92$ ,  $p < 0.01$ ,  $\eta^2 = 3.0\%$ , and on investigative  $F(1, 257) = 6.02$ ,  $p < 0.05$ ,  $\eta^2 = 2.3\%$  and enterprising occupations  $F(1, 257) = 5.13$ ,  $p < 0.05$ ,  $\eta^2 = 2.0\%$  (see Table 17.5).

**Table 17.5 Means of personal interest and work variables as a function of age and gender**

	Age					Gender			
	18-25	26-45	46-64	F	$\eta^2$	Male		Female	
	M.	M.	M.			M.	M.	F	$\eta^2$
<b>Interest types</b>									
Realistic	2.18a	1.50ab	1.61b	3.79*	0.029	2.28	1.61	7.92**	0.030
Investigative	2.68a	1.87b	1.91b	3.88*	0.030	2.70	1.98	6.02*	0.023
Artistic	2.43	2.02	1.72	2.48	0.019	2.19	2.01	0.44	0.002
Social	2.80	2.11	2.34	2.46	0.019	2.57	2.36	0.49	0.002
Enterprising	2.78a	1.85b	2.04b	5.01**	0.038	2.73	2.07	5.13*	0.020
Conventional	2.80	2.16	2.12	2.25	0.018	2.50	2.30	0.39	0.002
<b>Work values</b>									
Intellectual stimulation	4.16	3.97	4.16	1.46	0.018	4.09	4.10	0.01	0.00
Creativity	3.53	3.28	3.26	1.27	0.015	3.43	3.34	0.37	0.002
Independence	3.77	3.65	3.44	1.89	0.023	3.46	3.68	1.82	0.011
Group orientation	4.37	4.27	4.51	1.42	0.017	4.22	4.45	4.53*	0.028
Prestige	3.84	3.52	3.64	1.28	0.017	3.74	3.64	0.46	0.003
Security	3.42	3.76	3.82	3.63	0.043	3.61	3.69	0.26	0.002

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ .

### *Work values*

There were no age differences for work values. Regarding gender, men rated lower than women on group orientation  $F(1, 257) = 4.53, p < 0.05, \eta^2 = 2.8\%$  (see Table 17.5).

## REGRESSION ANALYSES PREDICTING WELL-BEING (GENERAL HEALTH, STATE AND TRAIT ANXIETY) OF PARTICIPANTS FROM PERSONALITY AND WORK-RELATED VARIABLES

### *Somatic symptoms*

According to regression analyses, participants with high neuroticism  $\beta = 0.18, t = 2.36, p < 0.01$ , high agreeableness  $\beta = 0.21, t = 2.97, p < 0.01$ , low extraversion  $\beta = -0.17, t = -2.24, p < 0.05$ , and low conscientiousness  $\beta = -0.19, t = -2.61, p < 0.01$  had higher levels of somatic symptoms. Furthermore, high state  $\beta = 0.19, t = 2.70, p < 0.01$  and trait anger  $\beta = 0.21, t = 2.56, p < 0.01$  was positively related to high levels of somatic symptoms. Low levels of personal values of self-direction  $\beta = -0.60, t = -2.67, p < 0.01$  and security  $\beta = -0.61, t = -2.34, p < 0.05$ , and high levels of benevolence  $\beta = 0.50, t = 2.38, p < 0.05$  and universality  $\beta = 0.35, t = 2.32, p < 0.05$  were also related to high levels of somatic symptoms. A low level of independence was related to high levels of somatic symptoms  $\beta = -0.40, t = -2.14, p < 0.01$  (see Table 17.6).

### *Anxiety-insomnia*

High neuroticism  $\beta = 0.22, t = 3.50, p < 0.01$ , high agreeableness  $\beta = 0.26, t = 3.42, p < 0.01$  and high state  $\beta = 0.22, t = 3.26, p < 0.01$  and trait anger  $\beta = 0.32, t = 3.95, p < 0.001$  predicted anxiety-insomnia (see Table 17.6).

### *Social dysfunction*

High neuroticism  $\beta = 0.19, t = 2.70, p < 0.01$ , high agreeableness  $\beta = 0.17, t = 1.96, p < 0.05$ , and high state  $\beta = 0.14, t = 1.82, p < 0.05$  and trait anger  $\beta = 0.18, t = 1.91, p < 0.05$  predicted social dysfunction. Furthermore, work values of independence are positively  $\beta = 0.36, t = 1.99, p < 0.05$  related to social dysfunction (see Table 17.6).

### *Severe depression*

High agreeableness  $\beta = 0.30$ ,  $t = 3.52$ ,  $p < 0.01$ , low extraversion  $\beta = -0.30$ ,  $t = -3.73$ ,  $p < 0.001$ , and high state anger  $\beta = 0.23$ ,  $t = 3.08$ ,  $p < 0.01$  and trait anger  $\beta = 0.23$ ,  $t = 2.61$ ,  $p < 0.01$  were significant predictors of severe depression (see Table 17.6).

### *State anxiety*

High agreeableness  $\beta = 0.17$ ,  $t = 1.93$ ,  $p < 0.05$ , low extraversion  $\beta = -0.20$ ,  $t = -2.44$ ,  $p < 0.01$ , high state anger  $\beta = 0.32$ ,  $t = 4.18$ ,  $p < 0.05$ , and low external control of anger  $\beta = -0.15$ ,  $t = -2.1$ ,  $p < 0.05$  were significantly related to high state anxiety (see Table 17.6).

### *Trait anxiety*

Low extraversion  $\beta = -0.24$ ,  $t = -3.14$ ,  $p < 0.01$ , high trait anger  $\beta = 0.38$ ,  $t = 4.53$ ,  $p < 0.001$ , high anger-in  $\beta = 0.17$ ,  $t = 2.19$ ,  $p < 0.05$ , and low external control of anger  $\beta = -0.16$ ,  $t = -2.35$ ,  $p < 0.05$  were related to high trait anxiety. Furthermore, individuals valuing service to others and working with other people tended to experience more state anxiety  $\beta = 0.44$ ,  $t = 2.88$ ,  $p < 0.01$  (see Table 17.6).

In general, women reported higher somatic symptoms and trait anxiety than men (see Table 17.6).

## **Discussion**

In this cross-sectional study, we investigated the well-being of unemployed people according to gender and age using the GHQ-28 (Goldberg and Williams, 1988) and State-Trait Anxiety Inventory for Adults (Spielberger et al., 1995). Our main finding is that more than 50 percent of unemployed people experience high levels of anxiety/insomnia and increased social dysfunction. Our results also indicated that for 15 percent of unemployed people the level of somatic symptoms is high, and 26 percent of the sample reported high severe depression. Similarly, most people report high trait and state anger (more than 50 percent). An important finding is that most unemployed individuals have negative subjective well-being. It has been shown in past research that unemployment as a psychological and social concept has a negative effect on the mental health of individuals (Blanchflower and Oswald, 2004). For individuals who lose their jobs, it is not just the loss of income or financial benefits that matter, it is also the loss of latent functions of work (Frey and Stutzer, 2002).

**Table 17.6** Hierarchical regression for the prediction of well being (general health and state trait anxiety) from gender, age, personality and work variables

	Somatic symptoms	Anxiety-insomnia	Social dysfunction	Depression	State anxiety	Trait anxiety
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
<b>1. Gender</b>	0.14*	0.07	0.02	0.04	0.07	0.15**
<b>2. Age</b>	0.07	0.05	0.07	0.11	0.10	-0.02
<b>3. Check list – five factors personality</b>						
Neuroticism	0.18**	0.22**	0.19**	0.10	0.06	0.07
Extraversion	-0.17*	-0.08	-0.14	-0.30***	-0.20**	-0.24**
Openness	0.11	0.03	0.08	0.08	0.008	0.05
Agreeableness	0.21**	0.26**	0.17*	0.30**	0.17*	0.03
Conscientiousness	-0.19**	-0.14	-0.14	-0.10	0.02	-0.02
<b>4. State-trait anger expression inventory</b>						
State anger	0.19**	0.22**	0.14*	0.23**	0.32*	0.08
Trait anger	0.21**	0.32***	0.18*	0.23**	0.07	0.38***
Anger-in	0.08	0.11	0.12	0.11	-0.03	0.17*
Anger-out	0.13	-0.08	-0.09	-0.01	-0.07	-0.26
Control-in	-0.24	-0.05	-0.02	-0.14	-0.05	0.22
Control-out	0.01	-0.16	-0.03	-0.07	-0.15*	-0.16*
<b>5. Personal values</b>						
Self-direction	-0.60**	0.06	-0.13	0.13	-0.16	-0.36
Stimulation	0.10	-0.06	-0.10	0.07	0.18	0.14
Conformity	-0.08	-0.09	-0.12	-0.02	-0.07	-0.15
Security	-0.61*	-0.14	0.37	-0.02	0.09	-0.11
Tradition	-0.31	-0.07	-0.36	-0.37	-0.34	-0.26
Achievement	0.22	-0.01	0.14	0.19	-0.06	0.28
Hedonism	0.16	-0.09	-0.14	-0.04	0.27	0.19
Power	0.02	0.19	-0.08	-0.07	0.02	-0.17
Benevolence	0.50*	-0.08	0.23	0.04	-0.03	0.27
Universalism	0.35*	0.09	0.05	0.31	-0.22	-0.05

Table 17.6 continued

	Somatic symptoms	Anxiety-insomnia	Social dysfunction	Depression	State anxiety	Trait anxiety
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
<b>6. Interest types</b>						
Realistic	0.01	-0.04	-0.06	0.01	0.01	-0.02
Investigative	0.10	0.01	-0.02	0.02	0.04	-0.12
Artistic	-0.15	0.17	0.06	-0.06	0.08	-0.05
Social	0.16	0.10	-0.14	-0.07	0.05	0.44**
Enterprising	0.12	-0.19	0.25	0.15	0.06	-0.04
Conventional	-0.22	-0.07	-0.07	0.03	-0.19	0.09
<b>7. Work values</b>						
Intellectual stimulation	0.16	-0.12	0.25	-0.25	-0.07	0.10
Creativity	-0.08	0.23	-0.07	0.10	-0.26	0.16
Independence	-0.40**	0.01	0.36*	0.28	0.02	-0.16
Group orientation	-0.20	0.07	-0.48	-0.06	0.34	-0.31
Prestige	0.14	-0.02	-0.19	0.21	0.16	0.22
Security	-0.17	-0.02	-0.05	-0.14	0.08	0.12

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

However, not all unemployed people experience low levels of well-being. In evaluating the effect of unemployment on individual well-being, individual, familiar, and macroeconomic variables should be considered (Blanchflower and Oswald, 2004). For example, employment is a key element of individual and social well-being for those who wish to work (Clark, 2010). Family relations also moderate the stress of unemployment (Berkman and Glass, 2000). Unemployment benefit systems and other determinants of job finding probabilities are important factors behind the consequences of unemployment for individual well-being (Clark, 2010).

The study results demonstrate no differences between men and women in general health. However, a greater number of unemployed women report high trait anxiety and neuroticism. These findings do not provide any support for the hypothesis of differences between unemployed men and women, but they

are consistent with the observation that in adulthood, the prevalence of anxiety is much higher in women than in men (WHO, 2005). Current explanations for these gender differences (internalizing versus externalizing) refer to the greater susceptibility of women to conformity pressures (Berry, Poortinga, Segall, and Dasen, 1992/2002).

Furthermore, females are socialized to be more concerned than males when forming connections with others and are therefore more affected by relational stresses (De Coster, 2005). This finding is confirmed by our study which indicates that females are more impulsive than men in personality traits, and more group-oriented in the work place. On the other hand, men scored significantly higher than women on the power and stimulation values and showed an increased preference for realistic, investigative and enterprising types of occupations. Stimulation and power emphasize the affective autonomy and the legitimacy of a hierarchical role, whereas group orientation indicates that interests of the group are not seen as distinct from those of the individual.

The hypothesis that unemployment exerts fewer psychological problems on younger people than upon older persons is not supported. For all age groups, becoming unemployed did not elicit differences on well-being, on trait and state anxiety, and other personality variables such as personality traits and anger experience and expression. There is evidence supporting the argument that the psychological costs of unemployment go beyond those arising from age (Winefield, 2002).

What are the psychological factors related to the low well-being of unemployed people? According to our results, unemployed women experience the largest reduction in psychological and physical health. The main determinants of the negative mental health of unemployed people are neuroticism, agreeableness, state and trait anger, and self-transcendence values (universalism, benevolence) that emphasize equality among people. Furthermore, social individuals valuing service to others, understanding, and empathy experience more anxiety than other unemployed people.

The negative correlation between extraversion and well-being indicates that social interaction and assertive behavior reduce the harmful effect of unemployment on well-being. Unemployed individuals with high extraversion experience fewer somatic symptoms and less severe depression, and less state and trait anxiety. The other determinants of positive well-being (low somatic symptoms and low trait and state anxiety) are; 1) conscientiousness,

characterized by achievement motivation and organization, 2) anger control-out, reducing the intensity of anger by relaxing, 3) high self direction and security values. Work independence that allows individuals to work in their own way, doing what they want according to their level of achievement and direction, is associated with low somatic symptoms but high social dysfunction.

In summary, unemployment is widely considered to have negative effects on well-being (Clark, Georgellis, and Sanfey, 2001), but our results do not provide support for this hypothesis. An important proportion of unemployed people reported positive well-being which is associated with low neuroticism, high achievement motivation, low social isolation, high self direction, high safety, and stability in societal and personal relationships. People with positive well-being are less likely to experience frequent intense angry feelings, and more likely to invest in attempts to monitor and prevent negative expressions.

Previous studies have demonstrated that the health-related effects resulting from unemployment are considered highly heterogeneous across countries (Kieselbach, 2000). In Greece, in general, the health problems of long-term unemployed young people are seen as a pre-existing condition and are not considered as a result of unemployment. Furthermore, the high level of family support is viewed as a protective factor for unemployed people (Kieselbach, 2000). From the perspective of coping theory, most unemployed people have resources to cope with the problem and to maintain a normal way of life. On the contrary, an important proportion of unemployed people lose the manifest (income) and latent functions of work, and this has a negative impact on their psychological well-being.

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# New Directions in Organizational Psychology and Behavioral Medicine

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