

Running head: COPING WITH UNEMPLOYMENT

Coping With Unemployment:  
Personality, Role Demands, and Time Structure

Greet Van Hoyer and Hanne Lootens

Ghent University, Belgium

Greet Van Hoyer, Department of Personnel Management, Work and Organizational Psychology, Ghent University; Hanne Lootens, Department of Personnel Management, Work and Organizational Psychology, Ghent University.

This research was supported in part by a Postdoctoral Fellow grant from the Research Foundation Flanders (FWO) awarded to the first author. We would like to thank the Flemish Public Employment Service for their help in collecting the data and Connie Wanberg for her valuable comments.

Correspondence concerning this article should be addressed to Greet Van Hoyer, Department of Personnel Management, Work and Organizational Psychology, Ghent University, Henri Dunantlaan 2, 9000 Ghent, Belgium. Phone: +32 9 264 64 54, Fax: +32 9 264 64 94, E-mail: [greet.vanhoye@ugent.be](mailto:greet.vanhoye@ugent.be)

### Abstract

Time structure has been found to be an important coping mechanism for dealing with the negative effects of unemployment on psychological well-being. This study extends the literature by investigating personality (openness to experience, conscientiousness, extraversion, neuroticism, and proactivity) and role demands (marital status, being the only breadwinner, having children, and household demands) as determinants of time structure during unemployment. In addition, five specific dimensions of time structure were examined: sense of purpose, structured routine, present orientation, effective organization, and persistence. In a sample of 231 Flemish unemployed individuals, we found that sense of purpose and present orientation positively predicted psychological well-being. With respect to personality, openness to experience was negatively related to sense of purpose. Conscientiousness related positively to sense of purpose, structured routine, effective organization, and persistence. Neuroticism related negatively to sense of purpose and present orientation. Proactivity positively predicted structured routine, but was a negative predictor of present orientation and persistence. Regarding role demands, being single and having children were positively related to structured routine. These findings highlight the importance of personality for maintaining time structure during unemployment.

**KEYWORDS:** Unemployment; psychological well-being; coping; time structure; personality; role demands.

## **Coping With Unemployment:**

### **Personality, Role Demands, and Time Structure**

Due to the global economic crisis in recent years, the number of unemployed individuals has grown considerably. The latent deprivation model of Jahoda (1982) proposes that employment does not only provide financial benefits (i.e., the manifest function), but is also associated with several latent functions. For example, having a job imposes a structure in people's life: every day they wake up, have breakfast, go to work, do their job, and go home at night. A job also creates the opportunity to be active and to achieve collective and personal goals. These latent benefits correspond to basic psychological needs that need to be satisfied to maintain one's psychological well-being. When people lose their job, they are deprived of their wage, but also of the latent functions of employment, resulting in a decline of their well-being (Paul & Moser, 2009). Importantly, Jahoda's model also posits that unemployed individuals who find other ways to achieve these latent benefits experience less negative consequences. Along these lines, a meta-analysis has demonstrated that people who maintain higher levels of time structure as a way to cope with unemployment experience higher psychological well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005).

Given its positive impact on psychological well-being, we need to understand the determinants of unemployed persons' time structure (i.e., the perception of one's time use as structured and purposive, Wanberg, Griffiths, & Gavin, 1997). The present study contributes to the literature by investigating how time structure during unemployment relates to individual personality traits (i.e., openness to experience, conscientiousness, extraversion, neuroticism, and proactivity) as well as to situational role demands (i.e., marital status, being the only breadwinner, having children, and household demands). Moreover, we explore how five different dimensions of time structure (Bond & Feather, 1988) relate to these determinants as well as to psychological well-being.

### **Time Structure and Psychological Well-Being During Unemployment**

Feather and Bond (1983) introduced the construct of time structure, which can be defined as the degree to which individuals perceive their use of time to be structured and purposive (Wanberg et al., 1997). In fact, this construct comprises some of the latent functions of the latent deprivation model of Jahoda (1982), namely: imposing structure, being part of collective and personal goals, and having regular activity (Mudrack, 1999). This implies that time structure is by definition a multidimensional construct. In line with this reasoning, Bond and Feather (1988) conceptualized time structure as consisting out of five distinct dimensions. “Sense of purpose” is the first dimension and reflects the degree to which people have the feeling that they are part of collective and personal goals. The more sense of purpose individuals perceive, the more they experience their time as being filled in a purposive and meaningful way and the less they are bored with their activities. “Structured routine” is the second dimension and refers to the extent to which individuals follow routines. Furthermore, the more structured routine people perceive, the more they structure their days in order to fulfill their plans. “Present orientation”, the third dimension, reflects the extent to which people focus on the present and live in the here and now. Persons with a low present orientation are more likely to dwell on missed opportunities in the past or to daydream or worry about the future. The fourth dimension is “effective organization” and reflects the degree to which people perceive their time as well-organized. Individuals with high effective organization do not switch aimlessly between activities and do not need a lot of time to ‘get going’. “Persistence” is the last dimension and refers to the degree to which people do not give up and hold on to finish their activities. The more persistence people show, the less easily they give up, even if they are faced with difficulties.

Bond and Feather (1988) also developed a scale to measure each of these five dimensions of time structure – the Time Structure Questionnaire. Even though this

questionnaire has been frequently applied to measure time structure in previous research, typically a single global measure of time structure has been used, neglecting the intended dimensions (e.g., George, 1991; Wanberg et al., 1997). Therefore, the current study applies a multidimensional approach and contributes to the literature by enhancing our understanding of the correlates of the different time structure dimensions (Feather & Bond, 1994).

Based on Jahoda's (1982) latent deprivation model, we expect time structure and psychological well-being to be positively related during unemployment. When unemployed individuals keep busy, hold their routines, and have a sense of purpose, they might approximate a working situation, providing them with latent benefits related to higher psychological well-being. In support of these theoretical arguments, Wanberg et al. (1997) found that unemployed persons with higher levels of time structure reported higher psychological well-being. A meta-analysis of McKee-Ryan et al. (2005) confirmed that time structure represents a coping resource for buffering the negative consequences of unemployment. Our study will try to replicate these findings yet at the same time extend previous research by exploring possible differences in how each of the five distinct dimensions of time structure is related to psychological well-being during unemployment.

*Hypothesis 1: Time structure will be positively related to psychological well-being during unemployment.*

In the following pages, we discuss the relationship of time structure during unemployment with personality and role demands and develop the corresponding hypotheses. Taking the definition of the five different dimensions of time structure into account, we expect that some personality traits and role demands might be related differently with these dimensions. However, given the scarcity of previous research, we formulate general hypotheses and exploratively test whether the relations of personality and role demands with time structure vary along the different dimensions.

## **Personality and Time Structure**

The degree to which people structure and use their time in a meaningful way can be determined by several factors (Wanberg et al., 1997). For example, individual differences such as personality traits can provoke specific reactions concerning time structure during unemployment. The most prevalent taxonomy of individual differences identifies five broad personality factors (Digman, 1990). Four of these Big Five personality factors seem conceptually most useful for predicting time structure during unemployment: openness to experience, conscientiousness, extraversion, and neuroticism. We do not include agreeableness in our hypotheses, based on its theoretical definition (Digman, 1990) on the one hand and the results in the time management literature on the other hand, which reports no empirical evidence for a relation between agreeableness and time management or time use (Claessens, Van Eerde, Rutte, & Roe, 2007). In addition, we investigate the predictive value of proactivity for time structure during unemployment, given that this specific personality trait seems to relate to being able and willing to turn a negative situation into a positive one in order to experience as much benefits as possible (Crant, 2000; Fryer & Payne, 1984).

### **Openness to Experience**

Openness to experience relates to traits such as being imaginative, cultured, curious, original, intelligent, broadminded, and artistically sensitive (Roccas, Sagiv, Schwartz, & Knafo, 2002). People scoring high on openness to experience like variation and new stimuli, dislike routines and habits, and are prone to subjective feelings and thoughts (Costa & McCrae, 1995; Digman, 1990). Conversely, individuals scoring low on openness to experience are more rational and conventional, and like routines (Digman, 1990; Roccas et al., 2002). Linking these characteristics to the definitions of time structure and its dimensions, we expect that persons with lower openness to experience will maintain a higher time structure during unemployment, because they are likely to have more routine, organization,

and present orientation (Bond & Feather, 1988). To the best of our knowledge, previous research did not yet investigate the relationship between openness to experience and time structure.

*Hypothesis 2: Openness to experience will be negatively related to time structure.*

### **Conscientiousness**

Conscientiousness refers to characteristics such as being persistent, planful, organized, responsible, hardworking, and achievement-oriented (Digman, 1990; Roccas et al., 2002), which are important attributes for maintaining time structure during unemployment (Feather & Bond, 1994). Given those characteristics, we expect more conscientious people to report higher time structure, because they are more likely to plan their activities, organize their time, set goals, and persist until they achieve their goals (Feather & Bond, 1983). Along these lines, Claessens et al. (2007) already suggested that conscientiousness might be closely related to time use. However, as far as we know, the present study is the first to empirically examine the relationship between conscientiousness and time structure.

*Hypothesis 3: Conscientiousness will be positively related to time structure.*

### **Extraversion**

Extraversion is associated with assertiveness, activity, talkativeness, sociability, energy, and positive emotions (Digman, 1990; Roccas et al., 2002). Taking these characteristics into account, we expect people high in extraversion to be able to maintain a high time structure during unemployment by keeping busy and experiencing their time as purposive (Feather & Bond, 1994). In line with this theoretical assumption, George (1991) found that positive emotions were associated with higher levels of time structure during unemployment. Furthermore, in a sample of students, Bond and Feather (1988) demonstrated that extraversion was positively correlated with sense of purpose as a specific dimension of time structure. To overcome the limitation of using a student sample, the present study tries to

replicate this finding in a sample of unemployed people.

*Hypothesis 4: Extraversion will be positively related to time structure.*

### **Neuroticism**

Neuroticism encompasses personal characteristics such as nervousness, guilt, shame, anxiety, doubts, worry, and self-pity (Roccas et al., 2002). Given these attributes, high scores on neuroticism might inhibit rather than facilitate time structure during unemployment (Claessens et al., 2007). Due to their negativism and worries about their unemployment situation (Creed & Watson, 2003), individuals high in neuroticism might linger more about the past and future, and have the impression that their time lacks purpose and routine (Feather & Bond, 1994). In support of these theoretical assumptions, Bond and Feather (1988) found a negative relationship between neuroticism and both global and dimensional measures of time structure in a sample of students. The present study extends previous research by investigating this relationship in a sample of unemployed individuals.

*Hypothesis 5: Neuroticism will be negatively related to time structure.*

### **Proactivity**

Proactive people take initiative, look out for opportunities, and set goals for themselves (Bateman & Crant, 1993; Crant, 2000). Furthermore, they are able to turn negative situations such as unemployment into a positive situation, so that they can reach the most valued goals and minimize negative consequences (Crant, 2000; Fryer & Payne, 1984). Based on these attributes, we expect proactivity to be positively related with time structure during unemployment, given that proactive individuals are more likely to remain active and experience purpose (Bond & Feather, 1988). Fryer and Payne (1984) found indirect evidence for this theoretical assumption in a qualitative study conducted in a sample of 11 unemployed individuals with high scores on proactivity. All these subjects tried to optimize their unemployment situation by undertaking as many new activities as possible and by keeping



their activity level high. However, to the best of our knowledge, the present study is the first to investigate the direct relationship between proactivity and time structure.

*Hypothesis 6: Proactivity will be positively related to time structure.*

### **Role Demands and Time Structure**

With respect to possible situational determinants of time structure, the present study focuses on role demands. In the course of one's life, people often assume new roles, which involve the introduction of new purposes and routines into the organization of daily life (Bond & Feather, 1988). As such, the demands posed by these roles are likely to influence unemployed individuals' level of time structure (Feather & Bond, 1994; McKee-Ryan et al., 2005; Wanberg et al., 1997). Four key role demands seem especially useful for explaining time structure during unemployment: marital status, being the only breadwinner, having children, and household demands.

#### **Marital Status**

Given that being married or living together with a partner is likely to affect people's purpose and routines (Sorensen & Verbrugge, 1987), we expect that marital status will influence unemployed people's time structure. Along these lines, findings of Walsh and Jackson (1995) suggest that individuals with a supportive partner experience fewer problems managing their time during unemployment. In addition, Bond and Feather (1988) observed that married students had higher levels of time structure than single students. Given that married or cohabiting individuals are more likely to receive support from their partner, we expect that they will maintain higher time structure during unemployment than single people.

*Hypothesis 7: Married/cohabiting individuals will have higher time structure than singles.*

#### **Only Breadwinner**

A second role we focus on is being the only breadwinner. Empirical findings show

that having the sole financial responsibility for a household is related to higher work role centrality (Walsh & Jackson, 1995) and more financial strain during unemployment (Creed & Watson, 2003). When confronted with job loss, breadwinners might experience a sharper loss of time structure than people without financial responsibilities. Given the importance they attach to their job, they might not only experience a reduction of their enforced activity, but also lose their sense of purpose. Furthermore, they might report lower routine and organization, because they lost their grip simultaneously with their job. Indirect evidence for these assumptions can be found in the results of Kilpatrick and Trew (1985), showing that individuals who were the only breadwinner of their family before job loss undertook less activity during unemployment and filled their time in a more passive way than people with less financial obligations. In addition, they reported lower levels of psychological well-being. However, this study was conducted in an exclusively male sample, while women can also be breadwinners and suffer from unemployment (Creed & Watson, 2003). Therefore, we expect that unemployed individuals, irrespective of their gender, who were the only breadwinner of their family before their unemployment will report lower levels of time structure.

*Hypothesis 8: Being the only breadwinner will be negatively related to time structure.*

### **Having Children**

As a parent, people have to organize their time to take care of their children. As such, having children brings routine, patterns, and activity into people's life, because children have to go to school, have to eat, have their hobbies, etc. (Ström, 2002). Conversely, people without children need only have consideration for themselves and can fill their days the way they want to. Since having children involves continuous obligations regardless of employment status, individuals without children might stand a bigger chance of having problems with time structure when confronted with job loss. These assumptions are in line with the finding that unemployed women tend to expand the time they spend on taking care of their children

(Ström, 2002). Therefore, we expect that unemployed persons with children will report higher time structure than childless individuals.

*Hypothesis 9: Having children will be positively related to time structure.*

### **Household Demands**

We expect that household demands will positively influence time structure during unemployment. Household demands might give unemployed persons the opportunity to remain active (Ström, 2002). Furthermore, the majority of household tasks are routine chores which need organization to fulfill them. In addition, Sorensen and Verbrugge (1987) suggested that unemployed individuals spend more time on other roles such as household demands to compensate for their job loss and to maintain their feeling of purposive time use. Along these lines, research has found that individuals expand the time they spend on household tasks during unemployment (Ström, 2002). However, to the best of our knowledge, there is no research investigating the specific relationship between household demands and time structure.

*Hypothesis 10: Household demands will be positively related to time structure.*

### **Personality, Role Demands, Time Structure, and Well-Being**

So far, we have argued that personality traits and role demands determine individuals' structured and purposive use of time as a coping resource to maintain their psychological well-being during unemployment. This suggests that time structure, as a coping mechanism, might mediate the relationships of these determinants with psychological well-being. Given that time structure is only one of many coping mechanisms (e.g., social support, financial resources) that unemployed individuals can appeal to, we expect partial mediation instead of complete mediation (McKee-Ryan et al., 2005).

*Hypothesis 11: Time structure will partially mediate the relationship of personality and role demands with psychological well-being.*

## Method

### Sample

Our sample consisted of unemployed individuals, taking into account two inclusion criteria. First, participants were required to have at least three months of previous full-time work experience, thus excluding students and school leavers. Second, participants had to be unemployed for at least one month to allow the unemployment to affect their time structure.

On the basis of these criteria, our final sample consisted of 231 unemployed persons. About half of the participants was male (52.8%) and the average age was 32.23 years ( $SD = 10.06$ ). On average, participants had 9.20 years ( $SD = 8.95$ ) of work experience and had been unemployed for 22.59 months ( $SD = 45.52$ , median = 10 months). Regarding education, 18.6% of our sample obtained a primary school degree, 58% a high school degree, and 23.4% a college degree. With respect to marital status, 48.9% was single, 43.7% was married or cohabiting, and 7.4% was divorced or widowed.

### Procedure

The data for this study were collected in collaboration with the Public Employment Service in Flanders, the Dutch-speaking district of Belgium. At the time of the data collection, the Flemish unemployment rate was relatively low (5.9%). Participants were recruited at a Workforce Center, which represents a kind of “one-stop shop” for unemployed persons, integrating all job search and unemployment related services offered by different governmental agencies. When people lose their job, they need to go to these Workforce Centers in order to receive unemployment benefits. Unemployed individuals visiting this Workforce Center during a two month period were asked to participate in the study. It was stressed that participation was voluntary and anonymous, that answers would be used for research purposes only, and that participants should answer honestly based on their own opinion or experiences, as there were no right or wrong answers. Of the 273 persons who

were approached, 257 agreed to participate, yielding a response rate of 94.14%. Of these 257 participants, 26 did not meet our inclusion criteria and were thus removed from further analyses. Therefore, our final sample consisted of 231 individuals who had at least three months of full-time work experience and had been unemployed for one month or more. Participants completed a questionnaire measuring personality, role demands, time structure, psychological well-being, and some demographic variables.

### Measures

Unless stated otherwise, items were rated on a 5-point Likert-scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Internal consistency reliabilities are shown in Table 1.

**Big Five personality factors.** Openness to experience (e.g., “I have a vivid imagination”), conscientiousness (e.g., “I make plans and stick to them”), extraversion (e.g., “I feel comfortable around other people”), and neuroticism (e.g., “I get stressed out easily”) were measured using four ten-item scales from the International Personality Item Pool (2001). These scales have been developed and validated as proxies for measuring the broad-bandwidth personality factors of the Revised NEO Personality Inventory (Costa & McCrae, 1995; Goldberg et al., 2006).

**Proactivity.** The 17-item Proactive Personality Scale (PPS) of Bateman and Crant (1993) was used to measure participants’ level of proactivity (Pringels & Claes, 2001). A sample item is “I am constantly on the lookout for new ways to improve my life”. This scale has been found to have sound psychometric properties and to correlate logically with conceptually related traits as well as criterion measures (Bateman & Crant, 1993).

**Role demands.** First, marital status was measured with one item: “What is your marital status?”, with 0 = *single/divorced/widowed* and 1 = *married/cohabiting* (Bond & Feather, 1988). Second, one item was used to measure the role as only breadwinner: “Before my unemployment, I was the only breadwinner of my family”, with 0 = *no*, 1 = *yes* (Creed &

Watson, 2003). Third, having children was measured with one item: “Do you have children?”, with 0 = *no children*, 1 = *children* (Kilpatrick & Trew, 1985). Finally, household demands were measured by asking how many hours participants weekly spend on various household tasks. Three different kinds of tasks were assessed in line with earlier research (Ström, 2002): (1) buying groceries, cooking, and washing dishes, (2) laundry, ironing, and other care of clothing, and (3) cleaning. We used the sum of these three items, representing the total number of hours weekly spent on household tasks, as the score for household demands.

**Time structure.** The Time Structure Questionnaire (TSQ) was developed by Bond and Feather (1988) to assess the extent to which individuals perceive their use of time to be structured and purposive. This scale consists of 20 items, representing the five specific theoretical dimensions of time structure: sense of purpose, structured routine, present orientation, effective organization, and persistence. Bond and Feather found support for this five-factor structure and reported conceptually sound relationships of these factors with personality traits and criterion measures. Participants were instructed to rate their time structure experience during their unemployment. A confirmatory factor analysis indicated that the expected five-factor model did not provide an acceptable fit with the data,  $\chi^2(160) = 337.29, p < .01, \chi^2/df = 2.11$ , comparative fit index (*CFI*) = .811, root mean square error of approximation (*RMSEA*) = .070. Inspection of the factor loadings revealed that four items had a loading lower than .40 on their respective factor. After removing these items, a confirmatory factor analysis on the basis of the 16 remaining items showed that the five-factor model produced a satisfactory fit,  $\chi^2(94) = 155.1, p < .01, \chi^2/df = 1.65, CFI = .924, RMSEA = .054$ . Moreover, the five-factor model fit the data significantly better than a model in which all 16 items loaded on one single global time structure factor,  $\Delta\chi^2(10) = 186.77, p < .01$ , as this one-factor model produced a poor fit,  $\chi^2(104) = 341.87, p < .01, \chi^2/df = 3.29, CFI = .704, RMSEA = .101$ . Sample items are “Sometimes I feel that the things I have to do during the day just do

not seem to matter” (reverse coded, *sense of purpose*, three items), “I follow a daily routine” (*structured routine*, four items), “I spend time thinking about opportunities that I have missed” (reverse coded, *present orientation*, two items), “Sometimes I have trouble organizing the things I have to do” (reverse coded, *effective organization*, four items), and “Once I have started something, I easily give up” (reverse coded, *persistence*, three items) .

**Psychological well-being.** In line with earlier studies (e.g., Wanberg et al., 1997), participants’ psychological well-being was measured using the 12-item General Health Questionnaire, which measures aspects of both positive well-being (e.g., feeling happy, enjoying things) and psychological distress (e.g., worrying, feeling under strain) (Goldberg, 1978; Koeter & Ormel, 1991). This questionnaire is well-validated and the most frequently used in previous unemployment research to measure psychological well-being (McKee-Ryan et al., 2005). Given that one of the original items (i.e., “Have you recently felt that you are playing a useful part in things?”) overlaps with the sense of purpose dimension of time structure, only 11 items were used in the present study. These items were rated on a four-point scale, ranging from 0 = *not at all* to 3 = *much more than usual*. Example items are “Have you recently been able to enjoy your normal day-to-day activities?” and “Have you recently been feeling unhappy or depressed?”. The items were recoded, so that higher scores reflect higher levels of well-being. The total sum score was used, with higher scores indicating higher psychological well-being.

**Control variables.** Based on prior research reporting a relationship of these variables with time structure and/or psychological well-being (Bond & Feather, 1988; Creed & Watson, 2003; Kilpatrick & Trew, 1985; Rowley & Feather, 1987; Ström, 2002; Walsh & Jackson, 1995), gender (0 = *male*, 1 = *female*), age (in years), unemployment duration (in months), education, and work role centrality were included as control variables. Two dummy variables (i.e., primary school and high school) were created for education, with the highest education

(i.e., college) as the reference group. Work role centrality was measured using five items from Warr, Cook, and Wall (1979). An example item is “Having a job is very important to me”.

### Results

Table 1 shows all means, standard deviations, and correlations. First, all dimensions of time structure (except for structured routine) were positively correlated with psychological well-being. Second, regarding personality, positive correlations were found between openness to experience and persistence, as well as between conscientiousness and sense of purpose, structured routine, effective organization, and persistence. Extraversion related positively to sense of purpose, effective organization, and persistence, whereas neuroticism was negatively related with sense of purpose, present orientation, effective organization, and persistence. Proactivity related positively to sense of purpose, structured routine, effective organization, and persistence, but negatively to present orientation. Finally, with respect to role demands, having children was positively related with structured routine and present orientation, whereas household demands related positively to effective organization.

To test the first hypothesis regarding the relationship between time structure and psychological well-being, a hierarchical regression analysis was conducted with psychological well-being as the dependent variable. The control variables were added in the first step and the five dimensions of time structure in the second step. As shown in Table 2, the control variables were not significant predictors in the first step. In Step 2, the dimensions of time structure explained 30.8% of incremental variance,  $F(5, 208) = 19.58, p < .01$ , providing support for Hypothesis 1. Unemployed people experiencing higher sense of purpose and present orientation reported higher psychological well-being.

To test the hypotheses regarding the relationship of personality and role demands with time structure, five hierarchical regression analyses were conducted with each of the dimensions of time structure as dependent variables (see Table 3). The control variables were



entered in the first step, personality traits in the second step, and role demands in the third and final step. In the first step, the control variables accounted for a significant amount of variance in structured routine (7.7%),  $F(6, 216) = 3.01, p < .01$ , present orientation (6.3%),  $F(6, 219) = 2.45, p < .05$ , effective organization (10.5%),  $F(6, 220) = 4.32, p < .01$ , and persistence (6.2%),  $F(6, 219) = 2.42, p < .05$ . Women experienced higher structured routine ( $\beta = .14, p < .05$ ), whereas older people reported higher effective organization ( $\beta = .18, p < .05$ ).

Unemployed individuals with higher work role centrality reported higher structured routine ( $\beta = .17, p < .05$ ), effective organization ( $\beta = .24, p < .01$ ), and persistence ( $\beta = .23, p < .01$ ).

In the second step, personality accounted for incremental variance in all time structure variables: sense of purpose (26.8%),  $F(5, 213) = 15.91, p < .01$ , structured routine (6.9%),  $F(5, 211) = 3.41, p < .01$ , present orientation (10.9%),  $F(5, 214) = 5.65, p < .01$ , effective organization (26.4%),  $F(5, 215) = 17.99, p < .01$ , and persistence (30.4%),  $F(5, 214) = 20.51, p < .01$ . As shown in Table 3, openness to experience was negatively related to sense of purpose, providing some support for Hypothesis 2. We found strong support for Hypothesis 3, as conscientiousness was positively related to sense of purpose, structured routine, effective organization, and persistence. Extraversion was not a significant predictor of time structure during unemployment, failing to support Hypothesis 4. In support of Hypothesis 5, neuroticism related negatively to sense of purpose and present orientation. As a more specific personality trait, proactivity was a positive predictor of structured routine, but a negative predictor of present orientation and persistence, providing mixed evidence for Hypothesis 6.

In the third step, role demands only explained incremental variance in structured routine (4.0%),  $F(4, 207) = 2.53, p < .05$ . Table 3 shows that singles reported higher structured routine during unemployment than married or cohabiting individuals, contrary to Hypothesis 7. Failing to support Hypothesis 8, being the only breadwinner was not related to time structure. In line with Hypothesis 9, unemployed persons with children experienced

higher structured routine. Household demands did not significantly predict time structure, failing to support Hypothesis 10.

Finally, we tested whether time structure mediated the relationship of personality and role demands with psychological well-being. To this end, we extracted 1,000 bootstrap samples from the dataset to estimate the indirect effects of each personality trait and role demand on well-being through the five time structure dimensions as parallel mediators, entering the control variables as covariates (Hayes, 2012). Results suggest a negative direct effect of neuroticism ( $-1.99$ ,  $SE = .56$ ,  $p < .01$ ) on psychological well-being, whereas a positive direct effect was observed for marital status ( $1.90$ ,  $SE = .81$ ,  $p < .05$ ), with married or cohabiting people reporting higher well-being. Furthermore, conscientiousness ( $2.49$ ,  $SE = .65$ , 95% CI [ $1.27$ ,  $3.82$ ]), extraversion ( $1.14$ ,  $SE = .39$ , 95% CI [ $0.51$ ,  $2.06$ ]), neuroticism ( $-1.69$ ,  $SE = .45$ , 95% CI [ $-2.72$ ,  $-0.92$ ]), and proactivity ( $1.30$ ,  $SE = .55$ , 95% CI [ $0.29$ ,  $2.47$ ]) showed indirect effects on psychological well-being through sense of purpose. In addition, we found (smaller) negative indirect effects of neuroticism ( $-0.27$ ,  $SE = .16$ , 95% CI [ $-0.67$ ,  $-0.05$ ]) and proactivity ( $-0.38$ ,  $SE = .20$ , 95% CI [ $-0.89$ ,  $-0.08$ ]) on well-being through present orientation. These results suggest that sense of purpose and, to a lesser extent, present orientation as dimensions of time structure partially mediated the relationship of most personality traits with psychological well-being, in line with Hypothesis 11. On the contrary, no mediation was observed for role demands.

## Discussion

### Main Conclusions

Previous research has identified time structure as an important coping mechanism for dealing with the negative effects of unemployment on psychological well-being (McKee-Ryan et al., 2005). The present study contributes to and extends the literature by investigating how individual personality traits and situational role demands relate to distinct dimensions of

unemployed individuals' time structure. This study yields several conclusions that enhance our knowledge of time structure during unemployment.

First, the results show the added value of a multidimensional approach of time structure. Even though previous unemployment research has mostly used a single global measure of time structure (e.g., George, 1991; Mudrack, 1999; Wanberg et al., 1997), some authors have suggested that a multidimensional approach would be valuable and give a more accurate view of the pattern of relations between the different dimensions of time structure and other variables (Feather & Bond, 1994). In our study, confirmatory factor analyses indicated that instead of one global factor, time structure was better represented by five specific dimensions as originally proposed by Bond and Feather (1988): sense of purpose, structured routine, present orientation, effective organization, and persistence. In addition, these distinct dimensions of time structure were differentially related to personality and role demands as well as to psychological well-being, generating a more complete and fine-grained understanding of time structure during unemployment (Feather & Bond, 1994). Taken together, these findings suggest that future research should follow a multi-dimensional approach toward conceptualizing and measuring time structure.

Second, in line with previous research (McKee-Ryan et al., 2005; Wanberg et al., 1997), we found that unemployed individuals with higher time structure reported higher psychological well-being. However, we extend the literature by showing that this relationship was mostly accounted for by the specific dimensions of sense of purpose and present orientation. Unemployed individuals who felt their time was filled in a valuable and purposive way and who focused on the present instead of dwelling upon the past or future, experienced higher psychological well-being. This indicates that unemployed people can draw on time structure, in particular sense of purpose and present orientation, as a coping resource to maintain their psychological well-being after job loss (McKee-Ryan et al., 2005).

Third, our findings suggest that personality might be an important determinant of time structure during unemployment, as it explained incremental variance in all time structure dimensions. Overall, we found strong support for conscientiousness as a positive predictor of time structure and for neuroticism as a negative predictor. Specifically, conscientiousness related positively to sense of purpose, structured routine, effective organization, and persistence, whereas neuroticism was negatively related to sense of purpose and present orientation. Even though it makes conceptual sense that unemployed individuals who are more conscientious and thus more likely to plan, organize, and persist, report higher time structure (Claessens et al., 2007), this relationship was not yet empirically tested. With respect to neuroticism, our results extend previous research in student samples (Bond & Feather, 1988). Unemployed persons higher in neuroticism are likely to have more doubts and worries about their unemployment and to perceive their time as filled in a less purposive way. In addition, they are more likely to doubt about the past or worry about the future, instead of living in the here and now. These results are in line with the time management literature, which states that more neurotic people experience more problems with the organization of their time (Claessens et al., 2007).

With respect to proactivity, mixed evidence was found. In fact, proactivity was a positive predictor of structured routine, but a negative predictor of present orientation and persistence. Given their initiative to improve current situations and to create new opportunities, it might be that more proactive people tend to focus more on their future desired employment than on their current unemployment, resulting in lower present orientation (Bateman & Crant, 1993; Crant, 2000). It might also be that their tendency to look out for new opportunities and change is associated with lower persistence, especially when other personality traits such as conscientiousness are controlled for (Crant, 2000). Although caution is required given the lack of previous research, at the very least our findings suggest

that the relationship between proactivity and time structure during unemployment might be more complex and less positive than generally expected (Fryer & Payne, 1984).

Fourth, the role demands investigated in this study explained incremental variance in only one dimension of time structure (structured routine). Our results suggest that marital status, being the only breadwinner, having children, and household demands might be less important for explaining time structure during unemployment than personality traits. It might also be that the effect of the drastic change in the work role on unemployed individuals' time structure is so overwhelming that the demands posed by other roles (that remain relatively stable) have little impact. Along these lines, previous research has found that unemployed people experience their time as less purposive and structured than employed people (Wanberg et al., 1997). In addition, with respect to having children, which was positively related to structured routine, future research might reveal additional relationships with time structure by using a more detailed measure (e.g., number, age, and residence of children).

Fifth, we found that time structure as a coping resource, in particular sense of purpose and present orientation, partially mediated the relationship of most personality traits with psychological well-being during unemployment. Even though married or cohabiting unemployed individuals in our study experienced higher psychological well-being than singles, this relationship was not mediated by time structure. Future research should investigate whether other coping resources such as social support and financial resources might mediate the effect of marital status on well-being (McKee-Ryan et al., 2005).

### **Limitations and Directions for Future Research**

This study has some limitations that call for caution in the interpretation and generalization of the results. First, we relied on self-report measures gathered by a single survey. Therefore, common method variance might have affected some of the results.

However, the differential relationships between personality, role demands, time structure, and

psychological well-being show that more is happening here than just common method variance. In addition, in line with recommendations (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), several precautions were taken to reduce common method variance such as the application of a procedure aimed at protecting participant anonymity and reducing evaluation apprehension, the use of valid and sound scales from previous research, the inclusion of both positively and negatively worded items, and the use of different response scales and anchors.

Second, the cross-sectional design of this study prevents drawing causal conclusions. However, our approach is consistent with previous research that has examined personality and role demands as determinants of time structure (Bond & Feather, 1988; George, 1991; Kilpatrick & Trew, 1985; Walsh & Jackson, 1995) and time structure as a determinant of psychological well-being (McKee-Ryan et al., 2005; Wanberg et al., 1997) instead of vice versa. Nonetheless, it would be very interesting for future research to apply a longitudinal design with multiple time waves or a diary design. Not only would this shed more light on the causal relationships between time structure and its determinants and outcomes, it would also allow to better grasp the dynamic nature of time structure as it might change over time with individuals moving in and out of unemployment. In addition, it is possible that in turn, psychological well-being might affect future levels of time structure, given that individuals experiencing lower well-being may have more difficulties purposively structuring their time.

Third, despite its frequent use in previous research concerning time structure (e.g., George, 1991; Mudrack, 1999; Wanberg et al., 1997), the Time Structure Questionnaire might benefit from some revising. In our study, this was evidenced by the need to remove four items to obtain an adequate fit and by the relatively low internal consistency reliabilities of the dimensional scales. The internal consistency reliability of the present orientation scale of time structure was especially low (.56). It should be noted that despite its label this scale consists

only of items measuring thinking about the past and future (reverse coded) instead of actually assessing one's focus on the present (Bond & Feather, 1988). In addition, one item was removed on the basis of its low factor loading, resulting in a two-item scale. These methodological problems might explain why previous research has mainly used a global score for time structure, despite the multidimensional nature of this construct. Due to this limitation, our results should be interpreted with caution, however, at the very least, they suggest that future research on the distinct dimensions of time structure and their differential relationships with other variables would be valuable. Therefore, future studies should try to expand and optimize all scales of the Time Structure Questionnaire, in order to get reliable measures of each dimension (e.g., by adding items). The reliability and validity of the revised questionnaire should then be tested in various samples and settings.

Finally, our sample consisted of Flemish unemployed individuals who had at least three months of previous full-time work experience and had been unemployed for one month or more at the time of the study. Future researchers should examine the generalizability of our findings in other populations, settings, and countries.

### **Practical Implications**

Our study has important practical implications for increasing time structure and psychological well-being during unemployment. First, our results suggest that unemployed people can use time structure, in particular sense of purpose and present orientation, as a coping resource to maintain their psychological well-being after job loss. Therefore, unemployed persons should be encouraged to fill their time in a valuable and purposive way (and to perceive it as such) and to focus on the present instead of dwelling upon the past or future, as this is likely to increase their psychological well-being. Thus, sense of purpose and present orientation represent important topics to be addressed in conversations and interventions by unemployment counselors.

Second, prevention campaigns might be developed to make people aware of the importance of maintaining high levels of time structure during unemployment.

Third, training programs can be developed in order to help unemployed individuals achieve higher levels of time structure and thus improve their psychological well-being. These programs might consist out of exercises by which individuals learn how to make plans, how to set goals, or how they can live in the here and now. For example, people might be encouraged to formulate specific reemployment goals and to translate these goals into concrete plans and daily job search activities. As a consequence, they would experience more time structure and therefore higher levels of psychological well-being.

Finally, given that the present study showed the importance of personality as a determinant of time structure during unemployment, it is possible to identify who might be most prone to lower time structure during unemployment. This risk group would most likely benefit from the above practical interventions. Specifically, unemployed individuals who are lower in conscientiousness and higher in neuroticism experience their use of time as less structured and purposive. Therefore, these risk groups might be guided and trained more intensively to improve their use of coping mechanisms to deal with their unemployment, including but not restricted to time structure.

## **Conclusion**

In conclusion, we found support for time structure as a coping resource that can be used to buffer some of the negative effects of unemployment. Specifically, unemployed individuals with a higher sense of purpose and present orientation experience higher psychological well-being. In addition, maintaining time structure during unemployment seems to be more closely related to personality than to role demands, with conscientiousness and neuroticism as key predictors.



### References

- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*, 103-118.
- Bond, M. J., & Feather, N. T. (1988). Some correlates of structure and purpose in the use of time. *Journal of Personality and Social Psychology, 55*, 321-329.
- Claessens, B. J., Van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of the time management literature. *Personnel Review, 36*, 255-276.
- Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment, 64*, 21-50.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*, 435-462.
- Creed, P. A., & Watson, T. (2003). Age, gender, psychological wellbeing and the impact of losing the latent and manifest benefits of employment in unemployed people. *Australian Journal of Psychology, 55*, 95-103.
- Digman, J. M. (1990). Personality structure: Emergence of the five factor model. *Annual Review of Psychology, 41*, 417-440.
- Feather, N. T., & Bond, M. J. (1983). Time structure and purposeful activity among employed and unemployed university graduates. *Journal of Occupational Psychology, 56*, 241-254.
- Feather, N., & Bond, M. (1994). Structure and purpose in the use of time. *Psychology of Future Orientation, 32*, 121-140.
- Fryer, D. M., & Payne, R. (1984). Proactive behaviour in unemployment: Findings and implications. *Leisure Studies 3*, 273-295.
- George, J. M. (1991). Time structure and purpose as a mediator of work-life linkages. *Journal*

- of Applied Social Psychology, 21, 296-314.*
- Goldberg, D. P. (1978). *Manual of the General Health Questionnaire*. Windsor, UK: National Foundation for Educational Research.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40, 84-96.*
- Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling* [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- International Personality Item Pool (2001). *A scientific collaboratory for the development of advanced measures of personality traits and other individual differences* (<http://ipip.ori.org/>). Internet website.
- Jahoda, M. (1982). Work, employment, and unemployment: Values, theories, and approaches in social research. *American Psychologist, 36, 184-191.*
- Kilpatrick, R., & Trew, K. (1985). Life-styles and psychological well-being among unemployed men in Northern Ireland. *Journal of Occupational Psychology, 58, 207-216.*
- Koeter, M. W. J., & Ormel, J. (1991). *General Health Questionnaire: Manual Dutch version*. Lisse, The Netherlands: Swets & Zeitlinger.
- McKee-Ryan, F. M., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology, 90, 53-76.*
- Mudrack, P. E. (1999). Time structure and purpose, Type A behavior, and the Protestant work ethic. *Journal of Organizational Behavior, 20, 145-158.*
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses.

- Journal of Vocational Behavior*, 74, 264-282.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical view of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Pringels, A., & Claes, R. (2001). Proactive Personality Scale (PPS): Development and preliminary validation. *Gedrag & Organisatie*, 14, 291-304.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28, 789-800.
- Rowley, J. M., & Feather, N. T. (1987). The impact of unemployment in relation to age and length of unemployment. *Journal of Occupational Psychology*, 60, 323-332.
- Sorensen, G., & Verbrugge, L. M. (1987). Women, work, and health. *Annual Review of Public Health*, 8, 235-251.
- Ström, S. (2002). Unemployment and gendered divisions of domestic labor. *Acta Sociologica*, 45, 89-104.
- Walsh, S., & Jackson, P. R. (1995). Partner support and gender: Context for coping with job loss. *Journal of Occupational and Organizational Psychology*, 68, 253-268.
- Wanberg, C. R., Griffiths, R. F., & Gavin, M. B. (1997). Time structure and unemployment: A longitudinal investigation. *Journal of Occupational and Organizational Psychology*, 70, 75-95.
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52, 129-148.

Table 1

*Means, Standard Deviations, Correlations, and Internal Consistencies of the Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Gender <sup>a</sup>	0.47	0.50	(-)																				
2. Age (in years)	32.23	10.06	.14*	(-)																			
3. Unemployment duration (in months)	22.59	45.52	.13*	.26**	(-)																		
4. Education: Primary school <sup>b</sup>	0.18	.39	-.08	-.08	.03	(-)																	
5. Education: High school <sup>b</sup>	0.58	.49	-.02	-.09	-.07	-.56**	(-)																
6. Work role centrality	3.80	0.88	.03	.04	-.06	.13	-.01	(.80)															
7. Openness to experience	3.56	0.60	-.06	-.01	-.01	-.07	-.08	.14*	(.79)														
8. Conscientiousness	3.59	0.63	.13	.15*	-.04	-.02	.04	.36**	.31**	(.80)													
9. Extraversion	3.42	0.72	-.05	-.05	-.01	.06	-.01	.19**	.44**	.31**	(.85)												
10. Neuroticism	2.79	0.77	.14*	.03	-.01	.02	.01	-.12	-.16*	-.38**	-.38**	(.87)											
11. Proactivity	3.45	0.56	.02	.11	.03	.10	-.08	.35**	.50**	.49**	.43**	-.21**	(.86)										
12. Marital status <sup>c</sup>	0.44	0.50	.22**	.15*	.00	.04	-.15*	-.03	-.12	.01	-.07	.13*	-.03	(-)									
13. Only breadwinner <sup>d</sup>	0.46	0.50	-.07	.18**	.05	.17*	-.10	.07	.03	.03	-.03	.00	.09	-.34**	(-)								
14. Having children <sup>e</sup>	0.35	0.48	.32**	.21**	-.02	.03	-.13*	-.05	-.08	-.04	-.13	.11	-.05	.30**	.05	(-)							
15. Household demands	16.09	12.91	.40**	.28**	.12	.09	-.06	.18**	-.05	.18**	.03	.01	.14*	.14*	.10	.37**	(.70)						
16. Sense of purpose	10.46	2.94	-.05	.07	-.02	.08	-.04	.04	.02	.39**	.23**	-.42**	.19**	-.03	-.05	-.04	-.01	(.69)					
17. Structured routine	12.61	3.22	.15*	.14*	.09	.06	-.02	.19**	.04	.27**	-.02	.00	.23**	-.06	.08	.15*	.10	.07	(.66)				
18. Present orientation	5.78	1.87	.13*	.05	-.08	-.19**	.11	-.10	-.12	.06	-.02	-.17*	-.23**	.04	-.08	.15*	.12	.23**	-.11	(.56)			
19. Effective organization	13.88	3.54	.11	.23**	.08	.00	-.01	.22**	.11	.57**	.20**	-.29**	.24**	.11	.02	.04	.20**	.53**	.25**	.24**	(.72)		
20. Persistence	11.66	2.74	.05	.07	.07	-.03	.05	.22**	.14*	.57**	.18**	-.31**	.18**	.00	.01	-.08	.10	.53**	.10	.13	.65**	(.78)	
21. Psychological well-being	21.42	6.85	-.13*	-.15*	-.06	.01	-.02	-.07	-.06	.05	.15*	-.43**	-.04	.10	-.15*	-.04	-.15*	.52**	-.12	.27**	.22**	.20**	(.90)

Note. *N* varies from 222 to 231. Internal consistency reliabilities ( $\alpha$ ) are shown on the diagonal. <sup>a</sup>0 = male, 1 = female. <sup>b</sup>Omitted dummy category for education is college. <sup>c</sup>0 = single, 1 = married/cohabiting. <sup>d</sup>0 = no, 1 = yes. <sup>e</sup>0 = no children, 1 = children.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2

*Hierarchical Regression of Psychological Well-Being on Time Structure Dimensions*

Predictor	Step 1	Step 2
<i>Control variables</i>		
Gender <sup>a</sup>	-.12	-.12*
Age (in years)	-.12	-.17**
Unemployment duration (in months)	-.02	.03
Education: primary school <sup>b</sup>	-.01	-.02
Education: high school <sup>b</sup>	-.02	-.03
Work role centrality	-.03	-.01
<i>Time structure dimensions</i>		
Sense of purpose		.51**
Structured routine		-.10
Present orientation		.16**
Effective organization		.05
Persistence		-.10
$R^2$	.038	.346**
Adjusted $R^2$	.011	.312**
$\Delta R^2$	.038	.308**

*Note.*  $N = 220$ . The values in the table are standardized regression weights ( $\beta$ ). <sup>a</sup> 0 = male, 1 = female. <sup>b</sup> Omitted dummy category for education is college.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3

*Hierarchical Regression of Time Structure Dimensions on Personality and Role Demands*

Predictor	Sense of purpose	Structured routine	Present orientation	Effective Organization	Persistence
<i>Control variables</i>					
Gender <sup>a</sup>	-.02	.10	.08	-.02	-.02
Age (in years)	.07	.05	.05	.08	-.03
Unemployment duration (in months)	-.03	.09	-.10	.08	.10
Education: primary school <sup>b</sup>	.10	.07	-.12	.00	.00
Education: high school <sup>b</sup>	-.02	.01	.02	.01	.03
Work role centrality	-.13	.09	-.07	.05	.05
<i>Personality</i>					
Openness to experience	-.19*	-.10	-.03	-.05	.01
Conscientiousness	.34**	.25**	.11	.53**	.59**
Extraversion	.11	-.11	.03	.06	.01
Neuroticism	-.27**	.08	-.22**	-.09	-.11
Proactivity	.06	.19*	-.30**	-.06	-.17*
<i>Role demands</i>					
Marital status <sup>c</sup>	-.04	-.16*	-.02	.11	.04
Only breadwinner <sup>d</sup>	-.08	-.03	-.05	.02	.03
Having children <sup>e</sup>	.04	.18*	.10	.00	-.06
Household demands	-.09	-.11	.11	.06	.03
<i>R</i> <sup>2</sup>	.295**	.186**	.194**	.381**	.369**
Adjusted <i>R</i> <sup>2</sup>	.244**	.127**	.136**	.337**	.324**

Note. *N* varies from 223 to 227. The values in the table are standardized regression weights ( $\beta$ ), from the final step. <sup>a</sup>0 = male, 1 = female. <sup>b</sup>Omitted dummy category for education is college. <sup>c</sup>0 = single, 1 = married/cohabiting. <sup>d</sup>0 = no, 1 = yes. <sup>e</sup>0 = no children, 1 = children.

\*  $p < .05$ . \*\*  $p < .01$ .