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## Vocational Interests and Big Five Traits as Predictors of Job Instability

### Abstract

Although empirical research on this topic is scarce, personality traits and vocational interests have repeatedly been named as potential individual level predictors of job change. Using a long-term cohort study ( $N = 291$ ), we examined RIASEC interest profiles and Big Five personality scores at the beginning of the professional career as predictors of subsequent job changes, both internal as well as external, over the next 15 years. Overall, results provide additional evidence for an individual difference perspective on job instability, although our findings vary across instability variables. Consistent with previous research, external job changes in particular related to individual differences. Specifically, scores on Investigative, Artistic, Enterprising and Conventional scales showed to be the most important interest related predictors. With regard to Big Five personality traits, strongest associations were found with Agreeableness and Openness. In addition, facet level analyses proved to be useful to further clarify linkages between personality and job instability.

*Keywords:* Job instability, job change, career mobility, inter-organizational mobility, extra-organizational mobility, RIASEC interests, Big Five traits

## Introduction

Over the past decades, research on job change widened its focus and went through some interesting evolutions. First, there was a growing interest in patterns of job mobility over a period of time, expanding the study of single turnover behaviors. Consequently, the conceptualization of job change now surpasses mere turnover behavior and is frequently labeled as job mobility, or patterns of intra- and inter-organizational transitions over the course of a person's work life (Hall, 1996; Sullivan, 1999). In addition to this broader conceptualization, there was also a shift in the way job change was valued. Specifically, the notion of job changes being intrinsically inefficient was abandoned. At the macroeconomic level, economists pointed out that job stability is not necessarily always a good thing as it can disable companies to restructure their workforce in times of structural change. Moreover, at the individual level, job change can be an opportunity to accumulate different work experiences and accordingly increase personal performance and market value. In fact, a solid body of research has shown that job shopping early in the career can be highly beneficial, resulting in greater wage gains than staying put with one employer (Bartel & Borjas, 1981).

Clearly, these evolutions in job stability research are the product of a number of factual changes in the labor market. Perhaps most perceptible are changes at the employer's side. As organizational lay-offs and restructuring are becoming more and more common now (Littler, Wiesner, & Dunford, 2003), it is not surprising that employers today no longer promote the idea of lifelong job security as a realistic employment goal. Concurrently, longitudinal studies in American as well as European employees' samples have shown that organizational commitment is declining over time (Bentein, Vandenberg, Vandenberghe, & Stinglhamber, 2005; Vandenberg & Self, 1993) and career researchers have identified a transition from organizational to boundaryless or Protean careers. These labor market

evolutions are further illustrated by evidence strongly suggesting that job instability has markedly increased over the past decades (Bernhardt, Morris, Handcock, & Scott, 1999; White, Hill, Mills, & Smeaton, 2004).

As job instability is becoming a salient aspect in many employees' work experiences, research on this topic is necessary to help us understand how individual careers unfold. The aim of present study is to gain further insight in possible individual level determinants of job instability. In previous research, job instability has been studied from very different viewpoints. In general, two main perspectives can be distinguished (Feldman & Ng, 2007). A *structural perspective* suggests structural factors in the labor market as the main determinants of employees' mobility. Accordingly, job mobility is considered to be mainly vacancy-driven (e.g., DiPrete, De Graaf, Luijkx, Tahlin, & Blossfeld, 1997). Although important, it is not likely that these structural factors account for all variation in job mobility. After all, even in times of severe economic recession, when job vacancies are limited, employees can still be motivated to pursue job mobility options. It is clear that individuals have different preferences toward job mobility, and the possible risks or uncertainties that come with it. In an *individual difference perspective*, it is theorized that one's career is, in part, governed by internal attributes like personality traits and vocational interests (Ng, Sorensen, Eby, & Feldman, 2007). Although this perspective seems intuitively logical and although explicit hypotheses have been stated (e.g., Ng et al., 2007), empirical research on the relationships between these individual difference variables and job mobility is scarce and characterized by some important limitations. First, there has been much more research on intentions to move and attitudes toward moving than on actual change behavior (Ng, Eby, Sorensen, & Feldman, 2005). Second, very few studies have examined individual differences in actual job moves over a longer period of time. Third, although theoretically considered

relevant, no studies have empirically investigated longitudinal relationships between vocational interests and the frequency of actual job changes. The aim of this study is to further expand research on job instability considered from an individual difference perspective. Using a prospective longitudinal design, both vocational interests and personality traits measured at the beginning of the career are examined as potential predictors of job instability throughout the first fifteen years of the professional career, further referred to as the first career stage.

### *Job Instability, Internal Mobility, and External Mobility*

To date, multiple types and taxonomies of job mobility exist (e.g., Nicholson & West, 1998). In this study, the focus is on the frequency of career transitions -both intra- and inter-organizational- during the first 15 years of a person's work life. As such, *job instability* in this study refers to the aggregate of three different types of moving behaviors: (1) moving to a different job within the same company, (2) moving to the same type of job with a different organization, and (3) moving to a different type of job with a different organization. In addition, we also differentiated between internal and external mobility behaviors. *Internal mobility* refers to any substantial change in work responsibilities, hierarchical level, or title within an organization. This includes internal promotions, transfers and demotions. *External mobility* refers to any change in the employing firm.

Finally, our conceptualization of job instability does not differentiate between voluntary and involuntary moving behaviors. The focus in this study is on the validity of vocational interests and personality traits in the prediction of job instability during the first fifteen years of the professional career. The individual difference perspective primarily suggests that dispositional attributes affect a person's preferences for and subsequent (voluntary) behaviors associated with job mobility. However, there is evidence that

individual difference variables, like personality traits, can also affect vocational life indirectly or employer-driven rather than employee-driven (De Fruyt & Mervielde, 1999). In addition, it is often very hard to determine whether and to which extent job changes are entirely voluntary. For example, employees can anticipate employer dismissal decisions by means of job change. Furthermore, job changes are often the result of joint decision-making between employer and employee (e.g., internal job changes as part of career management programs) or between an employer and his/her partner (e.g., the decision to drop out of work to take care of the children). Probably, individual difference variables like personality traits and vocational interests affect these kinds of change decisions as well; processes which can't be tapped when only unambiguous and clear-cut voluntary job change decisions are considered.

#### *Vocational interests and job instability*

Since its origin, Holland's RIASEC theory of vocational personalities has been widely applied to vocational life (Holland, 1997). In career research, the idea of 'congruence', which states that "*people find environments reinforcing and satisfying when environmental patterns resemble their personality patterns*" (Holland, 1985, pp.53) has received most attention. Numerous studies (e.g., Assouline & Meir, 1987) have found congruence to be positively associated with job satisfaction, stability, and success.

The aim of the present study is to investigate the validity of vocational interest profiles measured at the very beginning of the career for the prediction of job instability throughout the first career stage. Holland's (1985) descriptions of the six vocational personalities do not explicitly deal with the frequency of job changes. However, these descriptions do contain some cues on the desirability and likelihood of job instability for each of the six interest types (see also Feldman & Ng, 2007).

The *Enterprising type* prefers activities that entail the manipulation of others to attain organizational goals. This type values controlling others, the opportunity to be free of control, and being ambitious. (S)he would find holding a position of power most gratifying (Holland, 1997). This ambition and need to control others could motivate Enterprising types to engage in job changes throughout the first career stage.

The *Investigative type* prefers activities that entail the observational, symbolic, systematic, and creative investigation of physical, biological, and cultural phenomena. (S)he has a wide range of interests, is open to new ideas and experiences and dislikes repetitive activities (Holland, 1997). In addition, as they show substantial similarities with individuals high on Openness to Experience, it can be expected that individuals with Investigative interests are also more likely to welcome job opportunities. Their curious and experiential nature could motivate Investigative types to engage in job change behaviors throughout the first career stage.

The *Artistic type* prefers ambiguous, free, unsystematized activities that entail the manipulation of physical, verbal, or human materials to create art forms or products. (S)he values personal characteristics such as being imaginative and courageous but not being obedient, logical, or responsible (Holland, 1997). Hence, their continuous pursuit of self-expression and perhaps impulsive nature could encourage them to engage in job change behaviors throughout the first career stage.

*Hypothesis 1: Individuals with higher Enterprising, Investigative and Artistic career interests at the beginning of their professional careers will experience more job instability throughout the first career stage.*

The *Conventional type* prefers activities that entail the explicit, ordered, systematic manipulation of data and has an aversion to ambiguous, free, exploratory, or unsystematized

activities (Holland, 1997). People scoring high on Conventional interests prefer working on familiar tasks and in familiar surroundings. So, the obedient, dutiful and conservative nature of Conventional workers may discourage them to engage in job change behaviors throughout the first career stage.

*Hypothesis 2: Individuals with higher Conventional career interests at the beginning of their professional careers will experience less job instability throughout the first career stage.*

The *Social type* prefers activities that entail the manipulation of others to inform, train, develop, cure, or enlighten. These individuals further dislike explicit, ordered, systematic activities involving materials, tools, or machines. Contrary to the Social type, the *Realistic type* prefers activities involving the manipulation of things (objects, tools, machines and animals) and has an aversion to educational or therapeutic activities (Holland, 1997). For both vocational personality types, original descriptions of vocational preferences and adhered life goals and values do not provide explicit or implicit cues about the probability of job change behaviors. Therefore, no specific relations between Realistic and Social interest scores on the one hand and frequency of job changes on the other are expected here.

*Hypothesis 3: Scores on Realistic and Social interest scales at the beginning of a professional career will be unrelated to job instability experienced throughout the first career stage.*

Besides scores on the six interest scales, Holland's (1985) theory also provides secondary constructs (i.e. congruence, identity, coherence, consistency, differentiation, and commonness) to further interpret a vocational interest profile. In the present study, we focus on consistency and differentiation of interest profiles measured at the beginning of the career as predictors of subsequent job instability.



An interest profile is consistent in terms of RIASEC theory if the theoretical types most resembled are closely related or adjacent according to the hexagon (e.g., IA, SE). Although evidence is scarce and findings are mixed, high consistency is generally considered as positive and expected to be related to stability in work history (Holland, 1985; Reardon & Lenz, 1998). Therefore, in our study, we expect people with higher levels of interest profile consistency at the beginning of the career to experience less job instability throughout the first career stage.

The construct of differentiation is concerned with the range of scores in the whole interest profile and was originally created to capture what clinicians mean by a well-defined profile (Holland, 1985). A person who closely resembles one theoretical interest type and no other is highly differentiated, whereas a person who resembles all six RIASEC types to an equal degree is undifferentiated. Overall, the construct of differentiation has received less research attention compared to some of the theory's other assumptions. With regard to career stability, existing research mainly focused on student samples (e.g., Holland, 1968; Taylor, Kelso, Longthorp, & Pattison, 1980) and generally showed that high differentiation groups of students made more stable vocational choices than those of the low differentiation groups. Based on these preliminary findings, we also expect people with higher levels of interest profile differentiation at the beginning of the career to experience less job instability throughout the first career stage.

*Hypothesis 4: Higher levels of interest profile consistency and differentiation at the beginning of a professional career are related to lower levels of job instability experienced throughout the first career stage.*

### *Big five traits and job instability*

Personality has a long tradition in the study of vocational behavior. The idea that personality is meaningfully related to the kinds of careers people choose and how they perform in those careers is essential in most person-environment fit approaches to career choice and adjustment (e.g., Dawis & Lofquist's Theory of Work Adjustment, 1984). To date, the Five-Factor Model of personality (McCrae & Costa, 1987) can be considered as the most accepted personality taxonomy in the study of organizational behavior. Big Five personality measures have repeatedly been studied in relation to work and career related behaviors or outcomes (e.g., De Fruyt & Mervielde, 1999; Seibert & Kraimer, 2001). Previous studies that examined Big Five traits in relation to job change behavior mainly focused on turnover only at one point in time (Barrick & Mount, 1996). To our knowledge, Van Vianen, Feij, Krausz, and Taris (2003) were the first to study Big Five personality traits in relation to job changes over a longer period of time. Contrary to their hypotheses, they did not find any evidence for the validity of Big Five traits in the prediction of voluntary job changes. In the present study, the focus is on job instability during the first fifteen years of the professional career, with no differentiation between voluntary and involuntary change behaviors. Based on the conceptual meaning of the Big Five traits, specific hypotheses concerning their relation to job instability can be formulated.

*Agreeableness* concerns the kinds of social interactions an individual prefers, from compassion to tough mindedness. People scoring low on this dimension typically value self-interest over getting along with others. Because of their egocentric and competitive nature, we expect people with lower levels of Agreeableness at the beginning of the career to experience more job instability throughout the first career stage.

*Hypothesis 5: Lower levels of Agreeableness at the beginning of a professional career are related to higher levels of job instability experienced throughout the first career stage.*

*Extraversion* can be summarized as the quantity and intensity of energy directed outwards into the social world. People scoring high on extraversion like to seek new experiences and excitement (Watson & Clark, 1992). In addition, previous research (Vinson, Connelly, & Ones, 2007) found some Extraversion related traits (an activity scale and an outgoing scale) to be positively related with organization switching. Therefore, we expect people with higher levels of Extraversion at the beginning of the career to experience more job instability throughout the first career stage.

*Openness to Experience* refers to the active seeking and appreciation of experiences for personal benefit. As job changes allow one to seek more new experiences, we also expect people with higher levels of Openness at the beginning of the career to experience more job instability throughout the first career stage.

*Hypothesis 6: Higher levels of Extraversion and Openness to Experience at the beginning of a professional career are related to higher levels of job instability experienced throughout the first career stage.*

*Conscientiousness* is the degree of organization, persistence, control and motivation in goal directed behavior. Within this trait, a distinction is often made between two major dimensions, achievement orientation and dependability, which complicate potential relationships with job instability. On the one hand, Conscientiousness comprises features as Competence (C1) and Achievement Striving (C4), which could lead to increased desire and opportunities for (upward) mobility. Crockett (1962) for example found that people who reported a stronger achievement motive had greater upward mobility in their career. On the

other hand, Conscientiousness also holds characteristics as Dutifulness (C3) and Deliberation (C6), which could be inhibiting factors for job changes. Because of these opposite facet level processes, which could neutralize each other at the domain level, we do not expect to find a significant relation between Conscientiousness at the beginning of the career and job instability throughout the first career stage.

*Emotional Stability* deals with people's susceptibility to psychological distress. As people low on Emotional Stability demonstrate nervousness and Anxiety (N1), they may not be seen as desirable candidates for (upward) mobility (Ng et al., 2005). Similarly, high levels of Self-Consciousness or social anxiety (N4) could hinder people scoring low on Emotional Stability to consider or actively pursue job change opportunities. Conversely, high levels of Angry Hostility (N2) and/or Impulsiveness (N5) could increase the likelihood of job change. For example, Caspi, Elder, and Bem (1987) studied the lives of individuals over thirty years and found that ill-tempered adults, displaying hostility and moodiness, led more erratic work lives with a greater number of employers irrespective of their intelligence, socioeconomic status, and educational level. As for Conscientiousness, we expect opposite facet level processes to neutralize each other at the domain level, resulting in non significant relations between Emotional Stability at the beginning of the career and job instability throughout the first career stage.

*Hypothesis 7: Domain level scores on Conscientiousness and Emotional Stability at the beginning of a professional career are unrelated to job instability experienced throughout the first career stage.*

In personality psychology, divergent ideas exist on the question whether it is best to use broadly defined personality traits or narrowly defined traits for the prediction of certain outcomes. This has come to be referred as the 'bandwidth-fidelity dilemma'. With regard to

the Big Five dimensions of personality, it has been argued that these are characterized by great bandwidth (Briggs, 1989; Hogan, 1995) and some researchers (e.g., Ackerman, 1990; Hough, 1992; Tett, Jackson, Rothstein, & Reddon, 1994) have used the bandwidth-fidelity dilemma to argue against the use of broad personality variables. Their criticism is that too much information is lost when data are aggregated to the level of the Big Five, and they argue for a greater focus on more specific traits in organizational behavior. Likewise, Judge, Klinger, Simon and Yang (2008) note that specific traits like impulsivity and hostility have been extensively studied in psychology, except in organizational behavior research where they are virtually non-existent. Therefore, from an exploratory perspective, this study also examines facet level associations between Big Five traits and job instability during the first career stage.

## Method

### *Design and Participants*

Present study is part of an ongoing longitudinal research program on personality development and work related experiences in a Flemish alumni sample. In February-March 1994 (Time 1), three months before graduating, 934 college students from various faculties enrolled in this study, completing personality and interest inventories. One year later (Time 2), a first follow-up was organized, focusing on their current educational or occupational situations at that time (see De Fruyt & Mervielde, 1999). In 2009 (Time 3), exactly 15 years after the first study, a second follow-up of the 1994-sample was conducted. As the sample was last contacted in 1995, the first step for this follow-up consisted of tracing all research participants. Letters were sent to all 934 home addresses as reported 15 years ago asking to pass on any data that could help us to reach the addressee. Four weeks later, a reminder was sent to those addresses that had not responded to the initial letter. In sum, 590 subjects

(63.17%) responded to this mailing and provided us with a valid email address. For subjects that could not be reached with this mailing procedure, an alternative search was organized. Their names were entered in an online search engine (Google) and alternatively looked up via social and professional network sites (e.g. LinkedIn). Through this online search, 60 additional subjects were traced, bringing the total number on 650 potential participants, 69.59% of the entire 1994-sample.

Each of these potential participants were subsequently sent an email containing further information on the research project and the request to participate. Subjects that were interested in the study could find three internet links at the bottom of the document, each link leading to a separate module of the entire survey. For the purpose of this study, only the second module, which deals with participants' professional careers over the past 15 years, is considered. In sum, 291 (156 males and 135 females) of the 650 participants (44.77%) completed this second module.

To test for attrition effects, we compared baseline interest and personality scores of those who participated in this follow-up to the scores of those who dropped out. With regard to T1 vocational interest scores, no mean differences were found between continuers and drop outs. Similarly, no selectivity effects were found for interest profile differentiation and consistency. With regard to Big Five personality traits, no differences were found between continuers and drop outs at the domain level. However, at the facet level, we found that continuers had higher average scores ( $p < .01$ ) on Ideas (O5).

### *Measures*

#### *Questionnaires*

*NEO-PI-R.* At Time 1, the Big Five personality traits and their facets were assessed using the Dutch authorized adaptation of the NEO-PI-R (Costa & McCrae, 1992; Hoekstra,

Ormel, & De Fruyt, 1996). The NEO-PI-R is a comprehensive personality questionnaire, measuring five global and 30 more specific traits. For the entire 1994-sample ( $N = 934$ ), the NEO-PI-R yielded excellent Cronbach alpha coefficients on the domain level, that is, for Neuroticism  $\alpha = .92$ , Extraversion  $\alpha = .90$ , Openness  $\alpha = .88$ , Agreeableness  $\alpha = .90$ , and for Conscientiousness  $\alpha = .92$ . For the NEO-PI-R facets, reliabilities ranged from .61 (O6: Values) to .84 (N1: Anxiety, E3: Assertiveness, O1: Fantasy).

*SDS/BZO95.* Vocational interests at Time 1 were assessed using a Dutch authorized adaptation (BZO95; Hogerheijde, Van Amstel, De Fruyt, & Mervielde, 1995) of the Self-Directed Search (SDS), originally developed by Holland (1979). Cronbach alpha coefficients for the composite RIASEC scales in the initial 1994-sample ( $N = 934$ ) are .94 (Realistic), .90 (Investigative), .90 (Artistic), .90 (Social), .92 (Enterprising), and .90 (Conventional). In addition to RIASEC scale scores, we also computed differentiation and consistency of T1 interest profiles. For differentiation, the Iachan index was used as this method is generally believed to be more a more comprehensive measure compared to the original method of subtracting the lowest interest score from the highest (Alvi, Khan, & Kirkwood, 1990). The degree of consistency in interest profiles was calculated using Strahan's (1987) C1 index, which uses the top three Holland codes.

### *Job Instability*

The second module of our 2009 online follow-up aimed at describing participants' professional careers over the past 15 years (from September 1994 until April 2009) in a standardized manner. For this purpose, they were asked to break this career stage down into successive time intervals according to job and/or organizational changes. Each space of time had to be specified with a starting and ending date and covered at least three months. In addition, these intervals had to be coded according to the following categories: (1) first job,

(2) new job with a new employer or becoming self-employed, (3) same job with a new employer, (4) new job with the same employer (promotion, demotion, rotation), (5) career interruption (sickness, training, pregnancy, other), (6) same job as before career interruption and (7) job-seeking. *Job instability* is operationalized as the total frequency of changing behaviors, within and across employers (categories 2, 3, and 4). *Internal mobility* is operationalized as the frequency of job changes within the same employer (category 4); *external mobility* is the frequency of changing behaviors beyond the boundaries of a current employer (categories 2 and 3). Table 1 gives an overview of the descriptive statistics of all job instability variables.

### *Demographics*

*Gender* was used as a control variable as previous research has shown that it can be related to career mobility (Van Vianen & Fischer, 2002). We did not control for years of employment and level of education because of the homogeneity of the sample with regard to these variables. For each of the participants, the first fifteen years of their careers is considered. In addition, all participants were highly educated.

## Results

### *Correlations*

Table 2 displays the means, standard deviations, and intercorrelations among gender, the Big Five personality traits, RIASEC interest scales, secondary interest constructs, and job instability variables. Gender significantly correlated with three of the five personality traits, with women showing lower scores on Emotional Stability ( $r = -.21, p < .01$ ), and higher scores on Openness to Experience ( $r = .13, p < .05$ ) and Agreeableness ( $r = .17, p < .01$ ). In addition, all six RIASEC interest scales showed significant correlations with gender, indicating higher scores for women on Artistic ( $r = .24, p < .01$ ) and Social ( $r = .25, p < .01$ )



interests, and higher scores for men on Realistic ( $r = -.32, p < .01$ ), Investigative ( $r = -.22, p < .01$ ), Enterprising ( $r = -.14, p < .05$ ), and Conventional ( $r = -.14, p < .05$ ) interests.

Finally, gender significantly correlated with job instability, indicating less instability for women than for men ( $r = -.13, p < .05$ ).

### *Vocational Interests and Job Instability*

To further examine the associations between the vocational interests and job instability, Poisson regression analyses were performed for job instability, internal mobility and external mobility separately. This type of regression analysis is a special case of the Generalized Linear Model which uses a log transformation to adjust for the skewness of the data distribution. Poisson regression is especially relevant for the analysis of count data, which reflect the number of occurrences of a behavior in a fixed period of time (e.g. number of job or organizational changes). Each time, gender was entered in the first step as a control variable, followed by the RIASEC interest scales in the second step, and the secondary interest constructs in the final step.

Results show that gender was significantly associated with job instability ( $\chi^2 = 6.416, p < .05$ ) and external mobility ( $\chi^2 = 4.127, p < .05$ ), with women showing fewer job changes than men. For internal mobility, adding gender as a control variable did not significantly increase model fit ( $\Delta\chi^2 = 2.308, ns$ ).

In the second step, RIASEC vocational interest scales were entered in our prediction model. Results show that this increased model fit for overall job instability ( $\Delta\chi^2 = 24.467, p < .01$ ) as well as for internal mobility ( $\Delta\chi^2 = 14.447, p < .05$ ) as for external mobility ( $\Delta\chi^2 = 36.137, p < .01$ ). With regard to overall job instability, results partially confirmed our first hypothesis as we only found a significant positive association with Enterprising interest scores. In addition, the negative relation between job instability and Conventional interest

scores confirmed our second hypothesis. Finally, in accordance with our third hypothesis, no significant associations were found between job instability and Realistic or Social interest scores.

When only internal job mobility was considered, only two significant associations were found. First, our results show a positive association between Realistic interest scores and internal mobility. In addition, higher scores on the Enterprising interest scale were also related to more frequent internal job changes.

Most significant associations were found between interest scales and external mobility. Specifically, we found a positive association with Investigative, Artistic and Enterprising interests. In addition, higher scores on the Conventional interest scale were related to less frequent external job changes.

In the final step of our Poisson regression analyses, we entered interest profile differentiation and consistency as potential predictors of job instability, internal mobility and external mobility respectively. Contrary to our expectations (Hypothesis 4), we did not find any significant associations between the frequency of job changes and these secondary interest constructs. All Poisson regression coefficients are shown in Table 3.

#### *Big Five Domains and Job Instability*

A second series of Poisson regression analyses were performed to further examine the associations between the Big Five personality traits and job instability, internal mobility, and external mobility. Again, gender was each time entered in the first step as a control variable, followed by the Big Five domain scores in the second step.

The results show that adding the Big Five traits to our prediction model resulted in a significant gain in the prediction of job instability ( $\Delta\chi^2 = 11.54, p < .05$ ). As expected, a significant negative association was found with Agreeableness (Hypothesis 5) and no

significant domain level associations were found with Emotional Stability and Conscientiousness (Hypothesis 7). Finally, contrary to our expectations, we did not find a significant association between job instability and Extraversion, or between job instability and Openness to Experience (Hypothesis 6).

When differentiating between external and internal mobility, significant increase in model fit was only found for external job changes ( $\Delta\chi^2 = 15.859, p < .01$ ). Specifically, external mobility was positively related with Openness to Experience and negatively with Agreeableness. For internal mobility, the addition of Big Five traits did not result in a significantly better model fit ( $\Delta\chi^2 = 8.892, ns$ ). All Poisson regression coefficients are shown in Table 4.

#### *Big Five Facets and Job Instability*

Associations between NEO-PI-R facets and job instability were examined using partial correlations controlling for gender.

At the domain level, Agreeableness showed to be the most important personality predictor for overall job instability. Facet level associations depict that Modesty (A5) is the only Agreeableness related trait that is significantly correlated with job instability ( $r = -.13, p < .05$ ). Stronger facet level associations were found with Excitement Seeking (E5;  $r = .16, p < .05$ ) and Impulsiveness (N5;  $r = .18, p < .01$ ). Finally, job instability was also significantly related to Angry Hostility (N2;  $r = .14, p < .05$ ), Openness to Actions (O4;  $r = .14, p < .05$ ), Openness to Ideas (O5;  $r = .14, p < .05$ ), and Deliberation (C6;  $r = -.14, p < .05$ ).

With regard to internal mobility, domain level personality traits did not significantly improve the fit of our prediction model. Likewise, we only found modest evidence for predictive validity at the facet level as only two personality facets are significantly correlated

with internal mobility: Excitement Seeking (E5;  $r = .20, p < .01$ ) and Warmth (E1;  $r = .14, p < .05$ ).

External mobility was significantly predicted by Agreeableness (negative association) and Openness to Experience (positive association). At the facet level also, most significant correlations were found with Agreeableness related traits: Altruism (A3;  $r = -.19, p < .01$ ), Modesty (A5;  $r = -.18, p < .01$ ), Compliance (A4;  $r = -.15, p < .05$ ) and Tendermindedness (A6;  $r = -.13, p < .05$ ). The association between Openness to Experience and external mobility is reflected in the positive correlation with Ideas (O5;  $r = .15, p < .05$ ). Finally, the strongest facet level associations with external mobility were found for Angry Hostility (N2;  $r = .20, p < .01$ ) and Dutifulness (C3;  $r = -.20, p < .01$ ). All facet level partial correlations are shown in Table 5.

## Discussion

### *Vocational Interests and Job Instability*

Many researchers have theorized that individuals' specific career interests also affect job mobility and/or embeddedness (e.g., Lent, Brown, & Gail, 1994; Oleski & Subich, 1996). To our knowledge, this study was the first to empirically test longitudinal associations between vocational interests and job instability, using Holland's (1985) typology as this model is most commonly adopted and validated in the careers literature (Prediger, 2000).

First, we used a series of Poisson regression analyses to examine the effect of all RIASEC interest scales together while controlling for gender. Consistent with our expectations, we found a significant positive association between Enterprising interests and job instability. In addition, this positive association remained significant when only internal or external job changes were considered. Professional ambition and a need to control others could be one of the driving mechanisms behind these associations. Similarly, Chan, Rounds

and Drasgow (2000) found a positive relation between Enterprising interests and the motivation to lead. However, our results do not offer a definite test of this explanation as we did not distinguish between upward, downward or lateral job changes.

As Conventional types prefer working on familiar tasks and in familiar surroundings, we hypothesized that Conventional career interests should be negatively related to job instability. Indeed, we found that individuals scoring higher on the Conventional interest scale reported less overall and external moving behaviors. As Douce and Hansen (1990) note, Conventional career interests reflect a preference for routine and predictability in jobs which could explain lower levels of job instability, especially external job changes.

Because of the curious and experiential nature of Investigative and Artistic types, we expected a positive relation between these vocational interest scales and job instability. However, this was only confirmed when only external job changes were considered.

Finally, as expected, we did not find any significant relations between overall job instability on the one hand and Realistic and Social interests on the other. However, although there are no clear reasons to believe that Realistic individuals will exhibit certain types of job mobility (Ng et al., 2007), our results did indicate a significant positive relationship between realistic interest scores and internal mobility.

In addition to RIASEC interest scales, we also tested the validity of Holland's (1985) secondary interest constructs of differentiation and consistency in the prediction of job instability. Although they are often considered valuable from a practical point of view, these concepts have produced mixed evidence in past research on career stability (Holland, 1997). Consistent with Holland's (1985) original assumptions, we expected lower levels of differentiation and lower levels of consistency at the beginning of the professional career to be related to higher levels of career instability during the subsequent 15 years of

employment. However, the results show that adding differentiation and consistency to our prediction model did not significantly improve model fit for job instability, internal mobility and external mobility. These findings could be explained by the conceptualization of career instability that was used. In this study, job instability was operationalized as the frequency of job changes over the past 15 years, irrespective of any intrinsic aspects of job changes. Previous studies that looked at consistency and differentiation of vocational interests as predictors of career instability primarily focused on the nature of job change rather than on its frequency. In that perspective, frequent changes within the same domain also indicate stability, whereas a single shift toward a totally different domain can be interpreted as instability.

#### *Big Five Personality Traits and Job Instability*

Past research on personality and job change mainly focused on the prediction of turnover intentions or single turnover behaviors. Present study attempted to expand this line of research in two ways. First, job change is considered over a period of time, resulting in a measure of job instability during the first 15 years of the professional career. Second, a longitudinal design was used in which personality measured at the beginning of the career was used as a predictor of subsequent job change behaviors. This prospective design is particularly interesting given the growing evidence that personality, throughout adulthood, can develop under the influence of work related experiences (e.g., Roberts, Caspi, & Moffitt, 2003).

Consistent with our hypothesis, we found a significant negative relation between Agreeableness and overall job instability. In addition, people scoring low on Agreeableness also changed employers more frequently. This negative association between Agreeableness and external mobility can be interpreted in several ways. From an employee's perspective,

voluntarily changing organizations can be considered as a difficult decision. Employees leaving their organization may be perceived as rejecting their teammates and letting down their employer. It could be that individuals scoring high on Agreeableness are more sensitive for these uncomfortable consequences and value social peace and good relations over personal ambition, resulting in less mobility behaviors. Individuals scoring low on Agreeableness, on the other hand, care much less about interpersonal feelings or relationships and experience less difficulties with the loss effects that accompany organization switching. From an employer's perspective, it could be argued that employees high on Agreeableness are very much valued because of their positive contributions on team performance (e.g., Peeters, Van Tuijl, Rutte, & Reymen, 2006), and therefore are tied to the organization. Individuals low on Agreeableness, on the other hand, can be difficult to handle with in groups or organizations and are therefore less retained by employers.

Contrary to our expectations, Extraversion and Openness to Experience were not significantly associated with job instability. However, at least for Openness, we did find a significant relation when only external job changes were considered. This association is evident knowing that individuals high on Openness are characterized by being imaginative, being independent-minded, having wide interests, being non-conformist, being innovative, being complex, and being change oriented (John & Srivasatava, 1999). In addition, Vinson et al. (2007) also found higher scores on Openness related traits to be correlated with more frequent organization switching. Finally, consistent with our expectations, we did not find any significant domain level associations between any of our job instability variables on the one hand and Emotional Stability and Conscientiousness on the other.

In addition to the Big Five personality domains, we also explored the relations between the frequency of job changes and the NEO-PI-R facets, controlling for gender. This

enables us to examine the idea that some Big Five traits (e.g., Emotional Stability, Conscientiousness and Extraversion) are perhaps too broad to be related to job change behaviors.

For Emotional Stability, we expected Anxiety and Self Consciousness to cancel out the instability promoting effects of Angry Hostility and Impulsiveness. Although we did not explicitly test this buffering hypothesis, results do show some indications in this direction. Clearly, Angry Hostility and Impulsiveness are positively related to job instability, whereas for Anxiety and Self Consciousness the trend is towards a negative association. Similarly, for Conscientiousness, we expected opposite facet level effects of Competence and Achievement Striving on the one hand, and Dutifulness and Deliberation on the other. Results clearly support the negative effects of Dutifulness and Deliberation, especially with regard to external mobility. For Competence and Achievement Striving, near zero correlations were obtained.

Contrary to our expectations, we did not find a significant domain level association between job instability and Extraversion. Nevertheless, facet level analyses did indicate some aspects of Extraversion to be significantly related to job instability. Consistent with our domain level expectations, we found a positive association between Sensation Seeking and overall job instability. However, the need for environmental stimulation was only related with the frequency of internal job changes. Similarly, we found a significant positive association between Warmth and internal mobility. Warm people genuinely like people and easily form close attachments to others, which indeed could be a prerequisite for internal job changes. Finally, no Extraversion related traits were related to employer switching.

Besides explaining insignificant domain level relations, a facet level approach can also offer a more detailed understanding of established domain level effects. For example,



with regard to Agreeableness, facet level analyses show negative associations with Altruism (i.e. active concern with the welfare of others), Compliance (i.e. response to interpersonal conflict), Modesty (i.e. tendency to play down on own achievements), and Tendermindedness (i.e. attitudes of sympathy for others). In this light, from a personality point of view, switching employers to some degree has an egocentric basis. This idea is further sustained by the significant negative relation between external mobility and Dutifulness (i.e. emphasis placed on importance of fulfilling moral obligations).

### *Conclusions*

Using a prospective longitudinal design, this study examined the predictive validity of personality and vocational interests, measured at the very beginning of the professional career, for subsequent job mobility behaviors over the next 15 years. Overall, we found additional empirical evidence for an individual difference perspective on job mobility.

To our knowledge, this study was the first to empirically test the longitudinal predictive validity of vocational interests for job mobility behaviors over a long period of time. Indeed, our results show that RIASEC interest scores, measured at the beginning of the career, are to some extent related to subsequent job instability. Conversely, interest profile differentiation and consistency did not significantly predict the frequency of job changes over the next 15 years.

With regard to the Big Five personality traits, our results are consistent with previous research showing only modest evidence for validity in the prediction of mobility behaviors. Interestingly, we found the strongest association between job instability and Agreeableness, which is often the ‘forgotten trait’ in the study of organizational behavior. In addition, the possibility to look at facet level relationships between personality and job change variables proved to be useful to ameliorate our understanding of certain domain level relations.

Further, this facet level approach also illustrates how some Big Five traits (e.g., Emotional Stability and Conscientiousness) are perhaps too broad to the study individual differences in job instability.

Consistent with previous research, we also differentiated between internal and external moving behaviors. Overall, our research findings suggest that the individual difference perspective is less useful for the study of internal job mobility. Indeed it makes sense that other factors, like organizational characteristics, are more important in the prediction of internal job rotations than personality or vocational interests.

Finally, the present study is not free of limitations. First, our dependent variables (job mobility, internal mobility, and external mobility) do not distinguish between voluntary or involuntary mobility behaviors. The psychological processes underlying these two types of job instability can be very different, meaning that our results could differ if voluntary and involuntary mobility were studied separately. However, the purpose of this study was to examine the broader picture of stability and change during the first 15 years of a professional career from an individual difference perspective. Often, it is far from clear whether or not job changes are voluntary or not as in many cases they are the result of a joint-decision making process. In addition, this distinction is further complicated by the fact that people can proactively anticipate employer decisions. Nevertheless, the results of our study demonstrate that individual difference variables, like vocational interests and personality traits measured at the beginning of the professional career, can to some extent predict subsequent job instability over the next 15 years.

Second, we did not examine the direction of changing behaviors (upward, downward or lateral). Some researchers (e.g., Feldman & Ng, 2007) formulate specific hypotheses about personality traits, vocational interests, and direction of job change. However, we feel

that -in present labor market characterized by less clear-cut jobs, more diffuse responsibilities, and hierarchical organizational structures fading away- the direction of job change in terms of 'upward, downward or lateral' is often obscure and in many cases actually irrelevant.

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