The Role of Career Adaptability and Work Conditions on General and Professional Well-Being

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Impact of Career Adaptability and Work Conditions on General and Professional Wellbeing

#### Abstract

This study, conducted with a representative sample of employed and unemployed adults living in Switzerland (N = 2'002), focuses on work conditions (in terms of professional insecurity and job demands), career adaptability and, professional and general well-being. Analyses of covariance highlighted that both unemployed and employed participants with low job insecurity reported higher scores on career adaptability and several dimensions (notably on control) than employed participants with high job insecurity. Moreover, structural equation modeling within employed participants showed that, independent of work conditions, adaptability resources were positively associated both with general and professional well-being. As expected professional outcomes were strongly related to job strain and professional insecurity, emphasizing the central role of the work environment. Finally, career adaptability partially mediated the relationship between job strain and professional insecurity, and the outcome well-being.

*Key words*: Career Adaptability, Professional Insecurity, Job Strain, Professional Wellbeing, General Well-being.

#### Introduction

Several recent studies have examined the impact of work situation, in terms of job insecurity and/or job strain, on professional well-being (e.g., Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bosman, Rothmann, & Buitendach, 2005). However, the role and the impact of career adaptability resources (Savickas, 1997, 2005) in this process were not previously analyzed. Consequently, the main purposes of the current study were: (i) to evaluate the impact of job insecurity (past and future) and unemployment on career adaptability and well-being-related outcomes, and (ii) to investigate –within employed individuals— the relationships between career adaptability, professional insecurity and job strain and their effects on professional (i.e., job satisfaction and work-related stress) and general well-being (i.e., satisfaction with life and general health).

# **Labor Market Evolution and Current Context**

Today's career and professional landscape is characterized by increasing instability and demands related to productivity, adaptation skills, flexibility and coping with constant uncertainty, fear of being laid off, and difficulties in finding a new and/or adequate job (Kallberger, 2009; Rudisill, Edwards, Hershberger, Jadwin, & McKee, 2010). As a result of augmented organizational restructuration, downsizing or mergers, both job insecurity and the numbers of transitions throughout the working life have increased (Coetzee & de Villiers, 2010; Rudisill et al., 2010; Savickas, 2005). In other words, in this professional context employees can expect to encounter more frequently the risk of loosing one's job (Fouad & Bynner, 2008) and hence, periods of unemployment (or partial-unemployment). So, individuals have an increased necessity to develop and manage their own career paths and increased job strain (Rudisill et al., 2010). As defined by the Demand-Control Model (Karasek, 1979), job-related strain results from a combination of low job control or decision latitude and a high level of job psychological demands. Several studies (e.g. Bakker et al.,

2003) reported that job resources and control (such as job autonomy) are associated with job involvement and professional satisfaction, whereas job demands influence burnout, health complaints and emotional exhaustion.

Unfavorable conditions at work and employment situations (such as unemployment, underemployment or employment instability) can have negative repercussions on the individuals' personal and professional development, and quality of life (DeFrank & Ivencevich, 1998; Klehe, Zikic, Van Vianen, & De Pater, 2011). Job loss and unemployment are frequently considered as major life stressors (Price, 1992) and their negative effect on well-being, individual functioning and general health is widely documented (e.g., McKee-Ryan, Song, Wanberg & Kinicki, 2005; Wanberg, 2012). In fact, several studies observed increased depressive symptoms, anxiety, social isolation, somatic complaints and lower selfesteem and perceived quality of life for unemployed workers and their families (e.g., Brewington, Nassar-McMillan, Flower, Furr, 2004; McKee-Ryan et al., 2005). Compared to the employed, a number of studies showed that the unemployed reported diminished general well-being in terms of lower life satisfaction and self-esteem and increased anxiety and psychosomatic symptoms (e.g. Körner, Reitzle, & Silbereisen; 2012; Paul & Moser, 2009). However, Körner and colleagues (2012) point out that currently employed and unemployed individuals face similar labor market-related demands, such as difficulties in finding a new and/or appropriate job, lack of security in career path and planning. Moreover, the current profile of the employed is very heterogeneous, for example in terms of work activity rate (part-time vs. full-time), underemployment, type of contract (permanent vs. non-permanent), or job security. As a consequence of the growth of non-permanent employment contracts or underemployment situations, the work and career experience – with reference to expectation, career prediction and job security—is more and more varied (Coetzee et al., 2010). According to de Witte (2005, p. 1), job insecurity is "the perceived threat of job loss and the worries

related to that threat" and involves a lack of certainty about the future. Job insecurity, which is considered as one of the most common sources of job stress, affects several indicators of health and both professional and general well-being (e.g., Hellgren & Sverke, 2003; Rosenblatt, Talmud, & Ruvio, 1999). In this regard, compared to unemployment, recent studies highlighted that perceived job insecurity during employment has similar negative psychological effects (see de Witte, 2005).

In this professional environment that is marked by high job insecurity, career and personal resources –such as regulation skills, adaptability and self-awareness– are essential to face continuously changing environments and to respond to new and frequent demands (Hall & Chandler, 2005). Individuals need to have skills that allow them to quickly adapt to a variety of situations and changes (Savickas et al., 2009), such as job-loss.

# **Career Construction Theory and Career Adaptability**

The Career Construction Theory (CCT) of Mark Savickas (1997, 2005) presents a model for comprehending vocational behavior across life cycles. CCT incorporates and updates previous theoretical contributions and frameworks, such as Super's (1957, 1990), or Holland's (1997) concepts and presents three majors components: Vocational personality, life themes and career adaptability (that addresses the coping processes). So, the career adaptability represents the "how" of vocational behavior ("how an individual constructs a career") (Savickas, 2005). Given the dynamic nature of individuals and their contexts, peoples' adaptability is relative to the person–environment relationship and is in varying states of activation (Savickas & Porfeli, 2012). Savickas and colleagues (Savickas, 1997, 2005; Savickas & Porfeli, 2012) define career adaptability as the "individual's resources for coping with current and anticipated tasks, transitions and traumas in their occupational roles that, to some degree large or small, alter their social integration" (Savickas et al., 2012, p. 662). Career adaptability is a hierarchical construct comprised of four global dimensions of

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resources called adapt-abilities, i.e.: concern, control, curiosity and confidence. *Concern* consists of the ability to be aware of and to plan for a vocational future. *Control* reflects the perceived personal control over the vocational future and the belief about personal responsibility for constructing one's career. *Curiosity* reflects the tendency to explore one's environment, for example by exploring possible-selves and future scenarios. Finally, *confidence* is the self-confidence in one's ability to face and to solve concrete vocational and career problems (for example by learning new skills) (Savickas et al., 2012). These psychosocial resources are considered by Savickas (2005) as self-regulation capacities or skills that a person may draw upon to face and solve everyday life challenges (such as, unfamiliar, complex, and/or ill-defined problems presented by developmental vocational tasks, occupational transitions, and work and personal traumas). They help to form the strategies that individuals use to direct their adaptive behaviors ("adapting responses").

As an important set of individual resources, career adapt-abilities influence several work or career related variables and outcomes to various extents, such as work engagement, job satisfaction, career anxiety, successful job transitions work-stress, or job tenure (e.g., Brown, Bimrose, Barnes, & Hughes, 2012; Rossier et al., 2012). Moreover, the relationship between personality dispositions and several work-related attitudes (such as work engagement) seems to be partly mediated by career adapt-abilities (e.g., Rossier et al., 2012). Recent studies bring to light the positive relationship to quality of life and self-esteem (Soresi, Nota, & Ferrari, 2012; van Vianen, Klehe, Koen and Dries, 2012). Regarding the employment situation, in Duarte, Soares, Fraga, Rafael, Lima, Paredes and colleagues' study (2012), compared to employed individuals, unemployed reported higher scores on concern, control and curiosity dimensions. As argued by Zikic and Klehe (2006) on the one side, job loss can be one of the most stressful life events, but on the other side, unemployment can also trigger people's career adaptability. During the job search process unemployed individuals have to

activate and use a range of behaviors to face and cope with their current situation. In other words, they have to be active agents, by –amongst others– exploring professional opportunities, reflecting and career planning. Finally, Fugate, Kinicki and Ashford (2004) stressed the central role played by Savickas' adaptability for individuals' employability, conceptualized as enhancing movement between jobs, and that increases the possibilities of reemployment (McArdle, Waters, Briscoe, & Hall, 2007). In fact, employability was positively related to job search and finding reemployment six months later (McArdle, et al., 2007; McKee-Ryan et al., 2005). To conclude, career adaptability is a relatively recent concept and the research presented above highlights on the one hand, the usefulness of applying this concept in various employment situations and for understanding professional and general well-being. On the other hand, it is relevant to further study its roles and dynamic states of activation in relation to workers' situations (e.g., in terms of professional insecurity).

Based on the considerations emerging from the current literature presented above, we expected a negative relationship between job insecurity and both career adaptability and well-being. Furthermore, we assume an effect of career adaptability –independent of the relationship with professional insecurity and job strain– on workers' general and professional well-being. Finally, we expected to observe a mediation effect of career adaptability on the relationship between professional situation (in terms of job insecurity and job strain) and workers' well-being (both general and professional).

### Method

# **Participants**

Our sample consisted of a representative sample of employed and unemployed adults living in Switzerland and included 2'002 respondents from the French and German parts of Switzerland. The mean age was 41.99 (SD = 8.61), 1'033 participants were women (51.6%), and 1'070 were married or were living with a significant other (56.5%). Most participants had

a Swiss citizenship (n = 1'662, 83.0%), and 1'268 participants were German speakers (63.9%). Regarding the professional situation, 1'884 participants (94.1%) were employed and 118 were unemployed (5.9%). The subgroup of employed individuals ( $M_{age} = 42.01$ , SD =8.60) consisted of 960 women (51.0%), 1'204 were German speakers. Furthermore, 1'581 employed participants were Swiss (83.9%) and 1'070 were married or were living with a significant other (56.8%). Within the employed subgroup, 1'247 (61.1%) participants had a full-time job (i.e., activity rate equal to or greater than 90%) while 372 (19.5%) worked at an activity rate equal to or below 60%. Moreover, 266 (13.3%) employed participants indicated that, in the course of the last year, they faced at least once the risk of lay-off. Concerning the future job insecurity, 160 (8.5%) individuals reported a fear (somewhat or often) of loosing their current job (lay-off) in the next year. The subgroup of unemployed individuals ( $M_{age}$  = 41.54, SD = 8.65) included 73 (61.9%) women and 64 (54.2%) German speakers. As for nationality and family situation, 81 (68.6%) were Swiss and 56 (47.5%) unemployed participants were married or were living with a significant other. Of the unemployed participants, 67 (56.8%) were looking for a full-time job (100% activity rate) and 38 (32.2%) for a job at an activity equal to or below 60%. 54 (45.8%) individuals had been unemployed for 6 months or more. Comparing employed and unemployed subgroups, the proportion of men and women ( $\chi^2(1) = 5.29$ , p = .021), of Swiss and non-Swiss ( $\chi^2(1) = 18.37$ , p = .000) and of German and French speakers ( $\chi^2(1) = 4.47$ , p = .039) were statistically different. In fact, within the unemployed subgroup the proportion of women, non-Swiss and French speakers was higher. This pattern corresponds to the current situation in the Swiss labor market. However the associated effect sizes were quite negligible (respectively d = .10, d =.19 and d = .09). Finally, there were no age differences between employed and unemployed participants, t(2000) = 0.58, p > .05.

# **Procedure**

Data presented in this paper were part of the first data collection conducted from

January to April 2012 of the 8-year longitudinal survey on professional trajectories (Maggiori
et al., in press) of the Swiss National Centre of Competence in Research "Overcoming

Vulnerabilities: Life Course Perspective". More specifically in this article we used

participants recruited on the base of a representative sample (26-56 years) drawn from the

National register of the inhabitants and realized by the Swiss Federal Statics Office (SFSO).

When we consider the number of possible interviews and eligible individuals within the valid
addresses, we can estimate the total participation rate at 48.6%. Participation in the study was
voluntary and each participant completing the research protocol had the opportunity to choose
a gift –from four options– for a total amount of 20 CHF. This research complied with the
ethical rules of the Swiss Society for Psychology (SSP).

# Measures

Career adaptability. Career adaptability was assessed using the Career Adapt-Abilities Scale Form 2.0 from Savickas and Porfeli (2012). The CAAS contains 24 items that yield a total score, which indicates a person's career adaptability. The items are divided equally into four subscales that measure the adapt-abilities resources of concern, control, curiosity, and confidence. A score for each of the four dimensions was calculated. All items were rated employing a scale from 1 (*Not strong*) to 5 (*Strongest*). The validated CAAS French (Johnston, et al., 2013; Rossier et al., 2012) and German versions (Johnston, Luciano, Maggiori, Ruch, & Rossier, in press) showed alphas coefficients ranging from .75 to .86 for the French version, and from .86 to .88 for the German version. The reliabilities for the total scores were respectively .92 and .94.

**Job strain.** Job strain was measured with the Job Content Questionnaire (JCQ; Karasek, 1985). Two subscales from this questionnaire were used in the current study: psychological demands (5 items) and decision latitude (9 items). Each item was scored on a four-point rating

scale (1 = *Strongly disagree*, 4 = *Strongly agree*). Internal reliabilities for psychological demands and decision latitude were respectively, .73 and .81. A job strain score was calculated which represents a ratio term between psychological demands and decision latitude. Job demands are multiplied by 2, and then divided by decision latitude (Li, Yang, & Cho, 2006).

**Professional insecurity.** To assess general professional security, we used two independent single-items developed for the purpose of this study. The first asked participants how many times they faced the risk of loosing their job in the course of the last year. The second item asked how they evaluate the risk to loose the current job in the coming 12 months. The items were assessed respectively with five-point (1 = Never, 5 = Constantly) and four-point (1 = Very low, 4 = Very high) rating scales.

Work stress. Work-related stress was measured with the nine-item General Work Stress Scale (GWSS; De Bruin & Taylor, 2005). The GWSS is a one-dimensional measure of the work-related level of stress and proposes a Likert scale ranking from 1 (*Never*) to 5 (*Always*). The internal reliability reported by the validation study was .92.

**Professional satisfaction.** Professional satisfaction was assessed with six items from the JobSat Inventory of Rolland (1995, in Massoudi, 2009). The items were selected to cover different daily work domains (i.e., attitudes of the direct superior / boss, relationship with colleagues, salary, work conditions and professional security). Respondents indicated on a five-point scale their satisfaction with each work domain ( $1 = Not \ satisfied \ at \ all \ and \ 4 = Very \ satisfied$ ). Exploratory factor analyses (with oblique rotation) confirmed the items were in a single dimension and its alpha coefficient in this study was .74.

**Life satisfaction** was measured with Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The five items assessed the individuals' overall judgment of satisfaction with their life as a whole. Each item was rated with a seven-point Likert scale

(1 = *Strongly disagree*, 7 = *Strongly agree*). Regarding internal reliability, Pavot and Diener (1993) presented data emerging from six studies were coefficients ranged from .79 to .89.

General health. General health was measured using the 12-items version of the General Health Questionnaire (GHQ; Goldberg & Williams, 1988). This brief instrument was designed for assessing medical and psychiatric complaints. For each item participants evaluated their occurrence on a four-point response scale (i.e., *Better than usual*, *Same than usual*, *Less than usual*, and *Much less than usual*). This instrument has shown to be a reliable measure (e.g. Wang & Lin, 2011). As suggested by several authors, we used a modified dichotomous coding system (0-1-1-1), called the Goodchild and Duncan-Jones's method (CGHQ).

Demographic variables. Gender, age, nationality and language were used as control variables. Gender was coded 1 = male and 2 = female, age was measured with a fill-in-the-blank question as a continuous variable and nationality was coded 1 = Swiss and 2 = Non-Swiss. Concerning nationality, double citizenship with Swiss nationality was categorized as Swiss and double citizenship without Swiss nationality was categorized as non-Swiss.

Language was coded 1 = German and 2 = French. Furthermore, regarding unemployed people we measured the length of unemployment, in terms of months, using a continuous variable.

# **Analysis**

All analyses were conducted using the Statistical Package for Social Sciences (IBM SPSS Statistics) version 19.0 (SPSS Inc., Chicago IL, USA) and AMOS version 19.0 statistical package (Arbuckle, 2010). Bivariate correlation analyses were conducted to assess the pattern of relationships between variables considered in this study. In addition to Pearson's coefficients (r), we used point-biserial correlation  $(r_{pb})$  for discrete dichotomous variables (i.e., gender, nationality and language). The effects of professional insecurity and unemployment on career adaptability and well-being were explored with a series of analyses

of covariance (ANCOVA). The partial eta squared (partial  $\eta^2$ ) was calculated to estimate the magnitude of these effects. Furthermore, to verify that coefficients were not biased by differences in sub-sample sizes, we re-ran all ANCOVA analyses generating 95% confidence intervals (CI), based on 1'000 bootstrap samples. In order to explore the impact of work environment security, job strain and adapt-abilities resources on professional and personal well-being latent variables, for the employed group, we used structural equation modeling. Maximum-likelihood (ML) estimation method was used to examine the fit of the model. Following the recommendation by Kline (2010) several fit indices were considered to evaluate the model fit. More specifically the  $\chi^2$  per degree of freedom ( $\chi^2/df$  ratio), the goodness of fit index (GFI), the comparative fit index (CFI) and the Tucker-Lewis index (TLI). A model is considered to have a reasonable fit if the normed chi-squares ( $\chi^2/df$ ) is equal to or below 5 (Bollen, 1989), the CFI value is about .90 (Bentler, 1990) and, GFI and TLI values are about .95 or higher (Hu & Bentler, 1999). A RMSEA higher than .08 would suggest possible errors of approximation in the population and a value below .05 a good fit (Browne & Cudeck, 1992). Finally, a mediation analysis (with 1'000 bootstrap samples and CI of 95%) using structural equations modeling was conducted to analyze the possible indirect effect of work environment security and job strain on professional and general wellbeing through career adaptability.

#### **Results**

### **Descriptives, Reliabilities, and Correlations**

The internal reliabilities based on the total sample (N = 2'002), expect for JCQ job strain ( $\alpha = .76$ ) and JobSat ( $\alpha = .74$ ), were all above .85. The results were similar for the two languages. As can be seen from Table 1, regarding the relations between demographic characteristics and the other analyzed variables although results highlighted several significant correlations, overall –with the exception of the relation between the language and

work stress (French speaker reported more stress at work)— these association were negligible. However, due the statistical impact of age, nationality and language, these were controlled for in further analyses. Finally, job strain correlated positively with both future and past professional insecurity and negatively with all career adaptability dimensions and the total score.

### Job Insecurity (and Unemployment) and Career Resources

The first aim of this article was to evaluate the impact of job insecurity (past and future) and unemployment on career adaptability. Considering the distribution, for both past and future job insecurity we decided to aggregate data into two dichotomous variables (i.e., Low past job insecurity vs. High past job insecurity; Low future job insecurity vs. High future job insecurity). Regarding past job insecurity (the risk of being dismissed during the last year), to evaluate possible differences in relation to adapt-abilities resources between employed with low job insecurity (n = 1'595), employed with high job insecurity (n = 266) and unemployed participants (n = 118), we realized a series of ANCOVAs (with Bonferroni post-hoc), controlling for age, nationality and language (see Table 2). Results indicated an impact of professional insecurity on all CAAS dimensions –except for curiosity– and the total score. However, these differences were associated with negligible effect sizes. More specifically, except for curiosity, employed individuals with past low job insecurity reported higher scores on all career adaptability dimensions and the total score than employed with high job insecurity. Interestingly, unemployed participants indicated higher scores on control, confidence and the CAAS total score than the employed with high job insecurity. Moreover, analyses highlighted no differences between the low job insecurity employed and unemployed. When we checked results emerging from the 95% CI, except for a now significant difference between unemployed and high security employed on the confidence

dimension, overall the patterns of results –in terms of sub-groups differences– was similar to those indicated previously in relation to past and future job security.

Regarding the fear of loosing one's job in the next 12 months, another series of one-way ANCOVAs was utilized the compare future low job insecurity (n = 1'720), future high job insecurity (n = 160) and unemployed individuals (n = 118). Analyses highlighted a main effect of for future job insecurity on all dimensions and the total score of the CAAS (see Table 3). Bonferroni comparison revealed that, compared to employed with higher future job insecurity, employed with future lower job insecurity and unemployed participants showed higher values on CAAS total score and concern and control dimensions. Moreover, unemployed participants reported a higher score on confidence and curiosity dimensions than employed with future high job insecurity. As observed in relation to past job insecurity, analyses highlighted no significant differences between employed with future low job insecurity and unemployed individuals. The generated 95% CIs based on 1'000 bootstrap samples globally confirmed the pattern of results expect for the confidence dimension. In fact, these analyses highlighted a statistically significant difference between on the one side, high and low future insecurity employed, and on the other side unemployed and lower insecurity employed.

To further explore the impact of unemployment on the career adaptability resources, in a more exploratory way –considering the limited size of the unemployed sub-sample– we conducted a series of ANCOVAs (with Bonferroni correction for the post hoc comparisons), controlling for age and language (that were correlated with the length of unemployment, respectively, r = .26 and r = -.22) (see Table 4). Based on the length of unemployment at the moment of the data collection, unemployed participants were divided into three subgroups, i.e.: (i) Less than 3 months of unemployment (n = 34); (ii) 4-10 months of unemployment (n = 30); (3) 11 months or more of unemployment (n = 36). Results emphasized a significant

effect of the length of unemployment on all CAAS dimensions and the total resources. However, the effect on confidence was only marginally significant. The related effect sizes (partial  $\eta^2$ ) ranked from .05 for the confidence dimension to .09 for the total score. More specifically, post-hoc analysis indicated that, compared to the 0-3 month group, the 4-10 month group reported a higher score on the CAAS total score and concern, control and curiosity dimensions. Regarding the others comparisons (0-3 month vs. 11 month or more, and 4-10 month vs. 11 month or more) results showed no differences. Finally, 95% CIs – based on 1'000 bootstrap samples – confirmed the pattern of results expect for the differences between firstly the 4-10 and 11 months or more groups on concern and secondly between the 0-3 and 11 month or more groups on curiosity that were significant.

# Job Insecurity (and Unemployment) and Well-being

We conducted a series of one-way independent groups ANCOVAs to evaluate the impact of past job insecurity and unemployment (past low job insecurity vs. past high job insecurity vs. unemployed) on general well-being, controlling for demographic variables (i.e., age, nationality, and language) (see Table 2). Analysis conducted on the total sample (N = 2'002) showed a main effect of professional insecurity during the past year both on life satisfaction ( $\eta^2 = .08$ ) and general health ( $\eta^2 = .02$ ). Post-hoc analysis (with Bonferroni correction) indicated that, compared to employed with past low job insecurity, employed with past high job insecurity and unemployed reported lower satisfaction with life and more general health problems. Moreover, unemployed participants were less satisfied than high job insecurity participants. Furthermore, we compared employed participants in relation to professional well-being (n = 1'884). Job insecurity during the past year had a significant main effect on professional satisfaction ( $\eta^2 = .07$ ) and work-related stress ( $\eta^2 = .03$ ). More precisely, employed with a lower past job insecurity reported a higher job satisfaction and lower level of work-related stress.

Afterward we repeated analyses to assess the possible effect of future job insecurity (in terms of fear of loosing job in the coming 12 months) and unemployment on personal and professional well-being. The results from the ANCOVA on life satisfaction and general health (age, nationality and language controlled for), shown in Table 3, yielded a main effect for the independent variable ( $\eta^2$  respectively .07 and .02). The Bonferroni comparisons emphasized that employed with future low job insecurity reported significantly greater satisfaction with life and less health problems than employed with high job insecurity and unemployed participants. Furthermore, results showed that employed with high job insecurity reported a greater score on life satisfaction than unemployed individuals. No difference was highlighted between these two sub-groups in relation to general health. Concerning professional wellbeing, ANCOVA analyses within employed participants revealed that individuals with low job insecurity reported higher score on JobSat scale ( $\eta^2 = .10$ ) and lower score on GWSS ( $\eta^2 =$ .02) compared to individuals with higher job insecurity. In other words, employed participants with lower future job insecurity were more satisfied at work and less stressed. Regarding 95% CIs, both for past and future job insecurity indicators, the patterns of results regarding general and professional well-being -in terms of sub-groups differences- were similar to those indicated previously.

# Impact of Job Demands, Career Resources and Job Insecurity on Well-being

The two proposed models –including career adapt-abilities, job strain and professional insecurity and well-being– were tested within employed participants (n = 1'819) with SEM-analysis to assess the association of professional context, career resources and well-being. More specifically, in the first model we tested the effect on general well-being (satisfaction with life and general health) (see Figure 1 – left side). In the second model we analyzed the effect on professional well-being (job satisfaction and work stress) (see Figure 1, right side). For these analyses we reverse coded the general health and work stress scales. In this way

their scores are coherent with the others variables, such that higher scores indicate a better general health and lower levels of perceived work-related stress.

Regarding general well-being, the goodness-of-fit indices showed that the proposed model did not fit adequately to the data. In fact, the GFI, the TLI and the CFI were equal or greater than .95, however the  $\chi^2/df$  value was higher than 5 and the RMSEA was .06. Inspection of the modifications indices greater than 10 revealed an association between three of the measurement errors for the indicators of the resources dimensions. We included these covariations in a adjusted model (see Figure 1 – left side). As seen in Table 5, this adjusted model showed satisfactory values for all the fit indices considered in this study. More specifically,  $\chi^2/df$  value was lower than 4.50, RMSEA was .04. and GFI, TLI and CFI scores ranked between .97 and .99. As in the previously proposed model, in the adjusted model all observed variables loaded significantly on the relevant latent variables. Concerning latent factors, job insecurity and job strain covaried positively and significantly and both were negatively associated with career resources. Career resources had a direct positive effect on general well-being. On the contrary, job insecurity and job strain predicted negatively general well-being. It is interesting to note that, based on the standardized coefficients, career resources represented the most important predictor. Overall, the adjusted model explained 47% of the variance in general well-being. Finally following the example of procedure used by Bakker et al. (2003), to control for the possible effect of demographic variables, based on the correlations discussed previously (see Table 1), we introduced significant relationships in the adjusted model (i.e., the significant correlations between demographic variables and model variables). Then, we excluded non-significant paths and introduced one additional covariance based on modification indices. The control model –including demographic variables- did not modify the structural relationships and the model fit indices stayed satisfactory.

As seen in Table 5, except for  $\chi^2/df$  value (> 5.00), the proposed model for professional well-being showed an adequate fit with the analyzed data. RMSEA value was .05 and GFI, TLI and CFI were above .95. Next, based on indications emerging from the modification indices we introduced in the adjusted model three additional covariances between career resources errors. Considering the several indices analyzed, the goodness-of-fit of this new model was more than satisfactory. Compared to the previous model, the  $\gamma^2/df$  value decreased to 4.15. Furthermore, RMSEA value was .04 and GFI, TLI and CFI values ranked between .98 and .99. As in the general well-being adjusted model, career adaptability predicted positively professional well-being, while professional insecurity and job insecurity were negative predictors (see Figure 1, right side). Based on standardized coefficients, job insecurity was the most important predictor for professional well-being. Overall, the revised model explained 61% of professional well-being variance. When we controlled for demographic variables – introducing significant correlations between demographic and model variables -, the structural relationships remained stable. Concerning the fit of the control model, the pattern of the results was almost comparable with the adjusted model (with a decrease of the  $\chi^2$ /df and RMSEA values) indicating that demographic variables (i.e., age, gender and nationality) did not have an influence on the analyzed relationships between career resources, job strain and professional insecurity and their effect on professional wellbeing.

Finally, considering the direct effect of the work conditions variables, we adapted the two adjusted models presented above to assess possible mediation effects of the observed variable career adaptability resources (CAAS total score) on the relationship between job insecurity and job strain on the one hand, and general and professional well-being on the other hand (see Figure 2). Regarding the general well-being (see Figure 2, left side), analyses highlighted that career adaptability partially meditated the relationship between that

professional context and well-being outcomes. In fact both the indirect effects of job insecurity and job strain through career adaptability and their direct effects on general well-being were statistically significant (p < .05). With reference to the indirect effects, both job insecurity and job strain have a negative effect on career adaptability resources that are assumed to promote individuals' well-being. Compared to general well-being, analyses revealed a similar pattern of results for the professional well-being (see Figure 2, right side). In fact, job insecurity and job strain have both indirect –through career adaptability– and direct significant effects on professional outcomes. In other words, adaptability resources partially mediated the effect of work conditions on individuals' professional well-being.

#### **Discussion**

Considering the constantly changing and insecure professional context, workers need adaptability resources to face and manage professional demands and new career circumstances, such as working-time reduction, job-loss and finding reemployment (Fugate et al., 2004; Savickas et al., 2002). Based on a representative sample of employed and unemployed adults living in Switzerland, a first focus of this study was on the evaluation of the impact of job insecurity and unemployment both on career adaptability resources (as measured by the CAAS, Savickas & Porfeli, 2012) and well-being. Another focus was on the exploration of the relationships between career adaptability, professional insecurity and job strain and their repercussions on workers' general and professional well-being.

Regarding the first focus, analyses highlighted an impact of job insecurity (both past and future) and unemployment on career adaptability and their dimensions. Nevertheless, despite the statistically significant differences, the effects sizes seemed to indicate a moderate impact. Concerning the comparison between the employed and unemployed, these results are consistent with Duarte et al. (2012) study, which showed that unemployed participants reported higher scores on several adapt-abilities resources. However, with regard to employed

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individuals, Duarte and colleagues didn't consider the level of job security, which can provide a more detailed depiction of the professional situation and experience. In fact, when we observe the differences between the subgroups, our analyses revealed that, both unemployed individuals and employed with lower job insecurity reported higher values on the career adapt-abilities total score and several dimensions (notably on control) than employed with high job insecurity (both past and future perceived insecurity). In fact, individuals with a more insecure job situation reported less control over their vocational future. However, no differences was found between unemployed and employed with low insecurity. As proposed by Zikic and Klehe (2006), this pattern of results could partially be explained by the fact that unemployed people have to (re)activate and upgrade some resources to manage and overcome their situation, due to the obligation of reemployment and the job search process. Furthermore, this interpretation seem to be supported by the differences –in terms of adaptabilities resources- highlighted in relation to the length of unemployment. In fact, our data showed that after the first months of unemployment adapt-abilities resources increase and tend to remain stable. Nevertheless, it will be necessary to repeat analyses with a larger group of unemployed to confirm these tendencies. Globally, the entire pattern of results are coherent with Savickas' theory (1997, 2012) indicating that adapt-abilities resources are in varying states of activation (i.e., non-static structures), that can be triggered to face life and career challenges (such as professional transitions or work traumas) and are related to individuals' roles and contextual contingencies. However, the differences within employed people suggest that, on the one hand, greater adapt-abilities resources allow workers to find and/or stay in more stable professional situations. On the other hand, individuals in a more precarious situation face a more stressful and demanding professional context in which it is more difficult to activate and trigger the resources. Of course, further studies, notably based on a longitudinal perspective, will be necessary to test more adequately this assumption as to

verify the stability and developmental trends of adapt-abilities resources of unemployed participants in the long-term and after a possible reemployment.

Concerning the well-being related outcomes, our results are coherent with previous research (e.g., Hellgren et al., 2003; Rosenblatt et al., 1999) and indicate differences both between employed and unemployed individuals, and within employed individuals in relation to the job security. In fact, the results presented in this article showed that both low and high job insecurity employed showed greater general well-being (as measured in terms of life satisfaction and general health) than unemployed individuals. However, it is also important to stress that, compared to high job insecurity individuals, employed individuals with a less insecure professional situation reported greater life and professional satisfaction, less health complaints and lower work-related stress. Interestingly, this pattern of results was identical for both past and future job insecurity.

Concerning the second focus of this article, analyses conducted on the subsample of employed participants emphasized that career resources were negatively associated with professional insecurity and job strain. Furthermore, adapt-abilities resources predicted positively general and professional well-being latent variables, while job strain and job insecurity impacted negatively on reported well-being. These findings confirm previous studies (e.g., Brown et al., 2012; Rossier et al., 2012) showing a positive impact of career adaptability both on work-related outcomes and personal well-being even when including job strain and professional insecurity. More specifically, our models showed that career adaptabilities had a stronger association with general well-being, of which it was the main predictor, while, as expected, work-related well-being was predicted mainly by professional insecurity and job strain. This last result is coherent with evidences highlighted by de Witte (2005) indicating that job insecurity has a larger impact on professional well-being than on general one. Moreover, and coherently with reference to the mediator effect observed between

personal characteristics and several work-related outcomes (e.g. Johnston et al., in press; Rossier et al., 2012), career adaptability partially mediated the effect of professional context (in terms of job insecurity and job strain) on general and professional well-being. Finally, to confirm the impact of career adaptability on individuals' well-being and their repercussions and roles in professional transitions (such as reemployment, as suggested by Fugate et al., 2004), and to assess context-related intra-individual variability, longitudinal data will be necessary.

The present study has, however, some limitations. First, job insecurity was assessed by two self-reported items provided at the same time as the other measures analyzed. Although this procedure was used in several previous studies, as the others cross-sectional studies using self-report method, they are prone to possible common method bias and response bias. For this reason, it would be interesting to introduce some more objective information about employment security (such as, company downsizing intention) to compliment the self-evaluation. Furthermore, due to the data collection format and even though questions were kept as simple as possible, people needed sufficient knowledge of German or French to participate. This limitation is probably more important within unemployed individuals, where the rate of low skilled people is higher. Nevertheless, reaching less well-integrated people – for example due to language limitations— is a frequent problem in this kind of surveys (e.g. Laganà, Elcheroth, Penic, Kleiner, & Fasel, 2013).

To conclude, this study showed that firstly, the employment situation (in terms of job insecurity and unemployment) affected both career adapt-abilities resources and well-being-related outcomes. Hence, a simple comparison between employed and unemployed groups as homogenous entities is not adequate. It is important to identify and distinguish between more specific sub-groups in relation to professional characteristics, such as job insecurity or length of unemployment. In fact, unemployed individuals reported comparable career adaptability to

employed individuals with low job insecurity and higher resources compared to employed with high job insecurity. Moreover, our analyses showed differences in well-being, not only between employed and unemployed individuals, but also within the employed people depending on their level of job security. Secondly, when we control for job strain and professional insecurity, career adaptability positively predicted workers' general and professional well-being. Furthermore, the relationship between professional context (in terms of job strain and professional insecurity) and individuals' well-being was partially mediated by adaptability resources. Finally, the different career adaptability and well-being trends in relation to the employment situation, seems to indicate that, on one hand adapt-abilities resources react to environmental contingencies and can be (re)activated in a relatively short time. On the other hand a delayed positive effect of these resources is expected due to the more prominent effect of environmental factors (e.g., decreased income) on well-being during unemployment. This last consideration seems to be coherent with Lucas Clark, Georgellis and Diener's (2004) conclusions indicating that the unemployment experience can impact personal well-being in the medium- and long-term even after re-entering the labor market.

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Table 1 Means, Standard Deviations, Reliabilities and Correlations

		M	SD	1.		2.		3.		4.		5.		6.		7.		8.	
1.	Age <sup>1</sup>	41.99	8.61	_															
2.	Gender <sup>1</sup>	1.52	0.50	02		_													
3.	Nationality <sup>1</sup>	1.17	0.38	11	***	.00		_											
4.	Language <sup>1</sup>	1.37	0.48	01		.03		02		_									
5.	Past job insecurity <sup>2</sup>	1.21	0.59	02		.03		.07	**	01		_							
6.	Future job insecurity <sup>2</sup>	1.59	0.71	.02		.01		.09	***	.03		.44	***	_					
7.	CAAS – Concern 1	3.53	0.66	06	**	03		.05	*	.01		04		13	***	(.88)			
8.	CAAS – Control 1	3.94	0.61	.06	**	01		01		04		07	*	15	***	.58	***	(.86)	
9.	CAAS – Curiosity <sup>1</sup>	3.65	0.63	.06	**	.01		.02		.05	*	01		09	***	.60	***	.63	***
10.	CAAS – Confidence <sup>1</sup>	3.89	0.59	01		01		.05	*	06	*	05	*	13	***	.58	***	.72	***
11.	CAAS – Adaptability <sup>1</sup>	3.57	0.53	.01		01		.03		01		05	*	15	***	.82	***	.86	***
12.	JCQ – Job Strain <sup>2</sup>	0.87	0.23	08	***	.06	*	.05	*	06	*	.15	***	.17	***	-16	***	18	***
13.	SWLS <sup>1</sup>	5.21	1.15	.05	*	.02		08	***	.02		18	***	23	***	.32	***	.35	***
14.	GHQ-121	0.70	0.19	03		.03		01		.07	**	.11	***	.17	***	20	***	30	***
15.	JobSat <sup>2</sup>	3.21	0.44	.05	*	.00		07	**	01		27	***	42	***	.17	***	.25	***
16.	GWSS <sup>2</sup>	1.87	0.58	01		03		.02		.14	***	.15	***	.23	***	13	***	20	***
		9.		10.		11.		12.		13.		14.		15.		16.			
9.	CAAS – Curiosity <sup>1</sup>	(.87)																	
10.	CAAS – Confidence <sup>1</sup>	.68	***	(.88)															
11.	CAAS – Adaptability <sup>1</sup>	.85	***	.87	***	(.95)													
12.	JCQ – Job Strain <sup>2</sup>	13	***	13	***	17	***	(.76)											
13.	$SWLS^1$	.23	***	.26	***	.35	***	29	***	(.89)									
14.	GHQ-121	22	***	26	***	28	***	.20	***	39	***	(.89)							
15.	JobSat <sup>2</sup>	.13	***	.18	***	.21	***	-39	***	.38	***	27	***	(.74)					
16.	$GWSS^2$	09	***	16	***	17	***	.31	***	29	***	.45	***	39	***	(.87)			

*Note.*  $^{1}N = 2'002$  (total sample),  $^{2}n = 1'884$  (employed);  $^{*}p < .05$ ,  $^{**}p < .01$ ,  $^{***}p < .001$ ; Gender: 1 = Men, 2 = Women;

Nationality: 1 = Swiss, 2 = No-Swiss, Language: 1 = German speaker, 2 = French Speaker; For Gender, Nationality and Language point-biserial correlations coefficients ( $r_{pb}$ ) are reported. For Past and Future job insecurity scale scores are proposed. Alpha coefficients are on the diagonal in parentheses.

Table 2

Effect of Past Job Insecurity on CAAS and Well-being (Controlling for Age, Nationality and Language)

	Past low insecurity	Past high insecurity	Unemployed			
	M (SD)	M (SD)	M (SD)	 F	p	partial η²
CAAS - Total <sup>1</sup>	3.76 (0.51)	3.67 (0.51)	3.84 (0.54)	4.53	.011	.01
CAAS - Concern <sup>1</sup>	3.54 (0.65)	3.44 (0.71)	3.58 (0.68)	3.50	.030	<.01
CAAS - Control <sup>1</sup>	3.96 (0.60)	3.82 (0.63)	3.99 (0.63)	6.52	.001	.01
CAAS - Curiosity 1	3.65 (0.62)	3.64 (0.67)	3.75 (0.68)	1.11	ns.	<.01
CAAS - Confidence <sup>1</sup>	3.90 (0.58)	3.81 (0.66)	4.02 (0.59)	5.87	.003	.01
SWLS 1	5.36 (1.03)	4.75 (1.27)	4.22 (1.51)	80.03	<.001	.08
GHQ-12 <sup>1</sup>	0.68 (0.19)	0.74 (0.20)	0.75 (0.20)	14.42	<.001	.02
GWSS <sup>2</sup>	1.83 (0.57)	2.10 (0.63)	-	49.73	<.001	.03
JobSat <sup>2</sup>	3.26 (0.42)	2.92 (0.44)	-	146.87	<.001	.07

Note:  ${}^{1}N = 2'002$  (total sample),  ${}^{2}n = 1'884$  (employed).

Table 3

Effect of Future Job Insecurity on CAAS and Well-being (Controlling for Age, Nationality and Language)

	Future low insecurity	Future high insecurity	Unemployed			
	M (SD)	M (SD)	M (SD)	F	p	partial η²
CAAS - Total <sup>1</sup>	3.76 (0.52)	3.62 (0.56)	3.84 (0.54)	6.87	.001	.01
CAAS - Concern <sup>1</sup>	3.54 (0.65)	3.36 (0.68)	3.58 (0.68)	6.24	.002	.01
CAAS - Control 1	3.95 (0.60)	3.76 (0.65)	3.99 (0.63)	7.28	.001	.01
CAAS - Curiosity <sup>1</sup>	3.65 (0.62)	3.56 (0.67)	3.75 (0.68)	3.15	.043	<.01
CAAS - Confidence 1	3.89 (0.58)	3.78 (0.61)	4.02 (0.59)	5.08	.006	.01
SWLS 1	5.33 (1.05)	4.68 (1.28)	4.22 (1.51)	71.69	<.001	.07
GHQ-12 <sup>1</sup>	0.68 (0.19)	0.77 (0.19)	0.75 (0.20)	18.74	<.001	.02
GWSS <sup>2</sup>	1.84 (0.56)	2.17 (0.70)	-	41.59	<.001	.02
JobSat <sup>2</sup>	3.26 (0.41)	2.76 (0.43)	-	208.44	.000	.10

Note:  ${}^{1}N = 2'002$  (total sample),  ${}^{2}n = 1'884$  (employed).

Table 4

Length of Unemployment and Adapt-abilities (Controlling for Age and Language)

	0-3 month ( $n = 36$ )	4-10 month ( $n = 33$ )	11 month or more $(n = 38)$			
	M (SD)	M (SD)	M (SD)	F	p	partial η²
CAAS - Total	3.61 (0.56)	4.03 (0.58)	3.84 (0.49)	4.14	.019	.09
CAAS - Concern	3.42 (0.72)	3.83 (0.71)	3.44 (0.61)	3.55	.033	.07
CAAS - Control	3.74 (0.72)	4.18 (0.58)	4.05 (0.59)	3.20	.046	.07
CAAS - Curiosity	3.47 (0.70)	3.94 (0.72)	3.82 (0.66)	3.65	.030	.08
CAAS - Confidence	3.80 (0.57)	4.17 (0.64)	4.06 (0.54)	2.52	.086	.05

Table 5  $Structural \ Equation \ Models \ for \ General \ and \ Professional \ Well-being \ within \ Employed \ Participants \ (n=1'819)$ 

	$\chi^2$	df	$\chi^2/df$	p	GFI	CFI	TLI	RMSEA
General well-being								
Proposed model	146.12	22	6.54	<.001	.98	.97	.96	.06
Adjusted model	84.46	19	4.44	<.001	.99	.99	.97	.04
Control model	134.15	45	2.96	<.001	.99	.98	.96	.03
Professional well-being								
Proposed model	122.24	22	5.56	<.001	.98	.98	.97	.05
Adjusted model	78.83	19	4.15	<.001	.99	.99	.98	.04
Control model	120.29	46	2.51	<.001	.99	.99	.98	.03

*Note*. Covariance between items' error terms associated with a modification index equal to or above 10 were taken into account in the adjusted and control models; GFI=goodness of fit index; CFI=comparative fit index; TLI=Tucker–Lewis Index; RMSEA=root mean square error of approximation. Control mode: We controlled for age, nationality, gender and language.

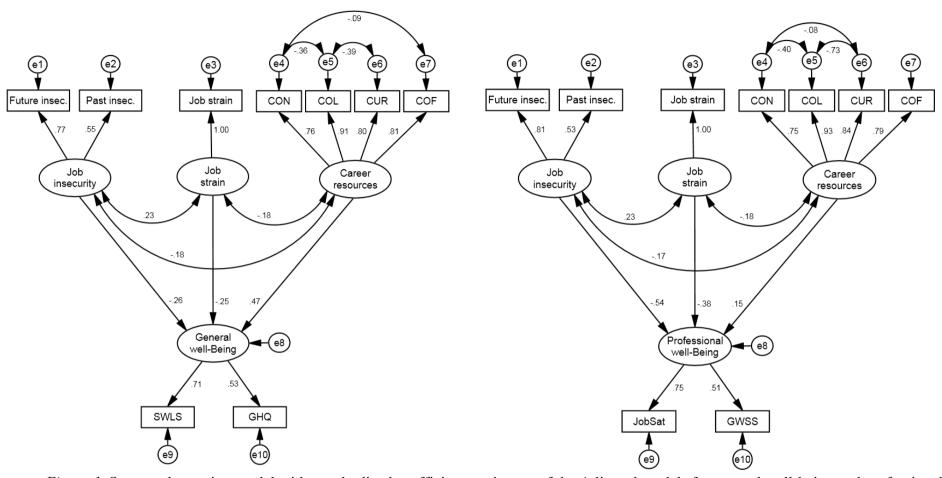


Figure 1. Structural equation model with standardized coefficients estimates of the Adjusted models for general well-being and professional well-being [CON = CAAS concern, COL = CAAS control, CUR = CAAS curiosity, COF = CAAS confidence, SWLS = Satisfaction With Life Scale, GHQ = General Health Questionnaire – 12, JobSat = JobSat questionnaire, GWSS = General Work Stress Scale].

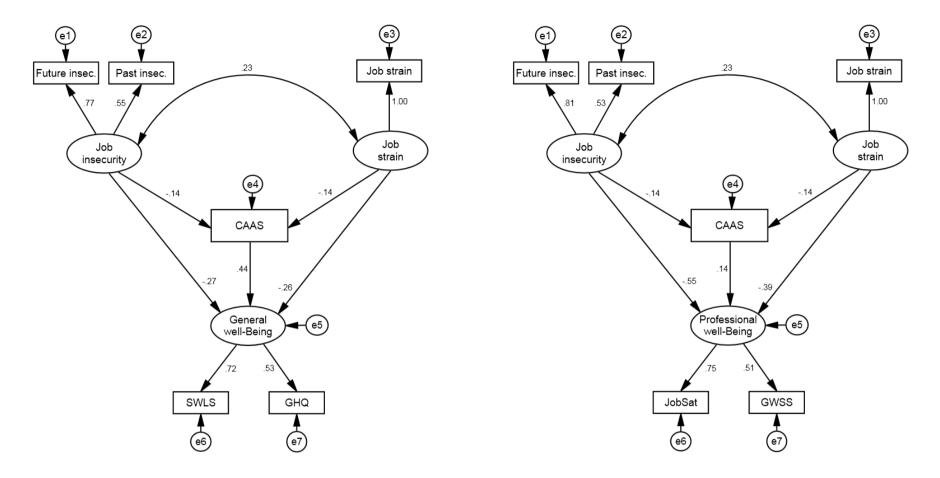


Figure 2. Mediation analyses using structural equation model with standardized coefficients estimates based on the adjusted models for general well-being and professional well-being [CAAS = CAAS total score, SWLS = Satisfaction With Life Scale, GHQ = General Health Questionnaire – 12, JobSat = JobSat questionnaire, GWSS = General Work Stress Scale].