

**EMPLOYABILITY AND INVOLUNTARY OCCUPATIONAL TRANSITIONS
MANAGEMENT: AN EXPLORATIVE RESEARCH WITH WORKERS ON
UNEMPLOYMENT BENEFIT**

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Abstract

Fragmented nature of current careers has placed at the centre of attention the concept of employability. This paper presents an explorative study aimed at analysing employability during the occupational transition of dismissed workers. In the light of the psychosocial approach suggested by Fugate and colleagues, the principal goal was to explore the relationship between dispositional employability and two crucial aspects of outplacement, re-employment and physical and mental health, hypothesizing a mediating role of perceived employability and perceived utility of outplacement services. The research involved pharmaceutical workers on unemployment benefit. Our analysis confirmed that dispositional employability can be considered as a latent multidimensional construct which sparingly summarizes three latent dimensions (self-efficacy in managing work changes; social capital; work career proactivity). Results highlighted that dispositional employability has a fairly direct impact on physical and mental health, but it is not associated with reemployment. Moreover perceived employability mediates the relationship between dispositional employability and perceived utility of outplacement services, while it doesn't have a direct connection with psychophysical health. Implications on career counselling are discussed.

Keywords: employability, unemployment, structural equation models, high order models.

1 Introduction

Contract instability and business reorganization involve a more and more great number of workers. In Italy, since the increasing problem of unemployment (INPS, 2010), institutions and some companies have implemented policies to support: the Ministry of Labour and Social Policies and several Italian regions have set up Welfare-to-Work actions (that integrate passive policies (financial assistance) with active policies consisting of services to support dismissed workers in searching of work through employment agencies accredited. In these actions strong emphasis is placed on the need for the worker to be active and to bring into play personal resources, and agencies need to support and enhance workers' employability.

In general the concept of employability, from the individual worker's perspective, is "an indicator of his or her opportunity to acquire and to keep an attractive job in the internal or external labour market" (Thjissen, 2008, p. 168). While there are several studies on employability of employees (Van der Heijde and Van der Heijde, 2006; O'Connell et al. 2008; Fugate and Kinicki, 2008), there are only few studies on dismissed workers, who are managing an involuntary transition that is not linked to a personal career project.

Following Bertson and Marklund (2007), it is possible to identify two kinds of employability: internal employability includes those personal resources that ease transitions from one post to another; external employability refers to external factors that increase the easiness of transitions, including the state of external labour market.

With reference to the psycho-social model of Fugate and colleagues (Fugate et al., 2004; Fugate, 2006; Fugate and Kinicki, 2008), the purpose of our contribution is to analyze the role of employability in the process of relocation of workers who have lost their jobs. Through structural equation models, we intend to explore the relationship between employability and the two most important aspects of the process of finding a new job, the physical and mental health and effective re-employment. We also want to understand if and how the perception of external employability and the attitude for the outplacement services intervene in the relationship between personal employability resources, physical and mental health and relocation. The research involved dismissed workers in the pharmaceutical sector, who joined programs of requalification and re-employment sponsored by companies within a *Welfare-to-Work* project called Welfarma.

2 To Manage Occupational Transitions: the Dispositional Employability Model

The constant changes in employment relationships are requiring workers to be ready to adapt strategies, knowledge, skills, qualities and behaviours in order to achieve their personal goals and to avoid the obsolescence of their professionalism. Many scholars have studied the characteristics of adaptability considering it as an essential resource to deal with the changing world of work without being overwhelmed (Savickas, 1997; Hall, 2004, Hall and Chandler, 2005; Tanucci, 2010). Within the series of studies on employability, Fugate and colleagues examined the construct of adaptability within the model of dispositional employability. The concept of dispositional employability is intended by the authors as the set of personal

qualities and resources that predispose people to be actively adapted to changes in work, increasing the chances of getting and keeping a job. In a first version (Fugate et al., 2004), the authors identified three dispositional dimensions separate, but interrelated, which increased the employability of a worker: adaptability, career identity and human and social capital. In a more recent version Fugate and Kinicki (2008) have defined the construct of adaptability in order to emphasize the proactive aspects, identifying in it 5 components: opening to changes at work, proactivity in career, resilience in the work, motivation career and work identity.

We believe this approach to adaptability is interesting for two main reasons: first, at a conceptual level, because it highlights the opportunity to dissociate from the restrictive aspects contained in the term adaptation. To be adaptable not only involves the willingness to adapt reactively to requests coming from the labour market, acquiring knowledge, skills and abilities consistent with them, it also includes the ability to grasp the opportunities that can offer an increasingly dynamic reality, before the changes take place. Secondly, with respect to the operationalization of the construct, the approach is interesting because it exceeds the excessive separation and fragmentation of the many studies about psychological predictive variables of success in re-employment. The claim that employability is built on a set of attributes and skills is in fact widely used (Bagshaw, 1996; Iles, 1997; Van der Heijden, 2002): the attributes considered were many (i.e. learning propensity, self-efficacy in career management and job search, resilience), but were treated in isolation or combined. To overcome this fragmentation Fugate and Kinicki (2008) have suggested to consider employability as a higher order latent multidimensional construct, a second-order factor representing the common elements between the latent and independent factors.

The dispositional approach to employability has been proposed as beneficial for both the employed and the unemployed. Leaning to the study of Latack et al. (1995), Fugate and co-authors have suggested that unemployed people with high personal resources of employability have increased availability to the use of outplacement services (Fugate and Kinicki, 2008), more likely to seize opportunities and to conclude successfully search for a new work. Empirical tests of these hypotheses, however, are still limited. To our knowledge only McArdle et al. (2007) have applied this model to unemployed persons. In their longitudinal study, carried out with Australian workers that were supported by organizations in the search of a new job, the authors have shown that workers with higher personal employability (career identity, social capital and adaptability, the latter measured by variables 'proactive personality' and 'boundaryless thinking') were activated more in the search and they had more probability to find a new job. However, the authors have not distinguished, in their analysis, the type of transition that workers were facing, not differentiating between those who looked for work since leaving the school circuit and those who had chosen to change careers, and those who had been fired. In doing so, they have been treated in an undifferentiated manner transition types while they have very different cognitive and emotional aspects. In addition, the construct of adaptability adopted by the authors include size (i.e. the proactive personality) not directly related to the contexts of work and career, in contrast to the arguments formulated by Fugate and Kinicki (2008).

In our study we have therefore chosen to consider the personal resources related to the relationship between a person and his/her work that might help to manage the mobility career experiences, including unwanted transitions. From an analysis of the literature on unemployment, we have chosen to focus on three resources of employability: social capital, proactivity and self-efficacy in managing job change. Social capital identifies resources that actors derive from their professional and family networks, resources that can be actively maintained and used to dealing with change at work. The proactivity in work and career reflects the tendency for people to gather information that may affect their professional development opportunities, both inside and outside their organization. The self-efficacy in managing job changes refers to the individual's believes in being able to face job changes and it is an aspect of the openness to changes in the work. According to many studies (i.e. Silla et al., 2009), self-efficacy is linked to exploratory behaviour in the career progress.

Based on the analysis of the literature, we formulated our first hypothesis:

Hypothesis 1: dismissed workers with a higher dispositional employability (social capital, work and career proactivity, self-efficacy in managing job changes) are more likely to be re-employed.

There is evidence that the state of unemployment is associated with a worsening of subjective well-being (McKee-Ryan et al., 2005). The state of deterioration of physical and mental health has human and social costs, both for individuals and community: containing anxieties and depressions is therefore one of the objectives of employment agencies. The empirical study by Fugate and Kinicki (2008) has shown that workers employed with higher dispositional employability faced with greater equanimity changes that affect their organizations, while maintaining a high commitment.

Based on these considerations, we formulated our second hypothesis:

Hypothesis 2: for workers in involuntary occupational transition, a higher degree of dispositional employability is associated with better physical and mental health.

3 Contextual Determinants of Employability

Success in finding a job and subjective well-being during transition are influenced not only by personal resources but also by the context the worker live in during this occupational transition phase. Personal employability resources as well as contextual risk and opportunity factors act together in building different careers.

External resources that can ease occupational transition are: market condition (i.e. available offers, mechanisms of selection put in actions by companies); re-employment and workers' re-qualification services.

To analyse the permeability of market conditions we used the meaning of perceived employability, that is to say the perception of having available job alternatives for whom the worker think to be skilled.

Along with Forrier et al. (2009) we focused on the perceived employability since individual actions are often more driven by the perception of a situation than by the actual reality.

As suggested by Forrier et al. (2009), workers find job opportunities also in relation to the structural characteristics of the working world (i.e. number of offers, ease of match between supply and demand, mechanisms for selection of organizations). It follows that personal employability resources and contextual factors of risk and opportunities both help in forming career paths. In line with other scholars (Berntson and Marklund., 2007, Rothwell and Arnold, 2007), in our contribution we analyze the external employability through the construct of perceived employability, defined as the perception of an individual to have chance to get a new job and then to have a skill spendable. To our knowledge, the relationship between personal employability resources and perceived employability is still poorly understood. In their model Fugate and Kinicki (2008) theorize that workers with high adaptability are most active, tend to look around and find information and contacts: it is possible that these behaviours contribute to increasing the visibility of external resources, promoting the encounter with opportunities for development or reconfiguration of professional identity, before unthinkable, increasing the perception of having possibility to find new job opportunities.

On this base, dispositional employability should positively influence perceived employability.

Hypothesis 3: the level of dispositional employability influences perceived employability.

Some studies show that workers who believed they had a skill spendable tend to have a lower stress level than those who feel less spendable skill. Moreover the level of perceived employability can reduce negative effects on the mental health of workers caused by job insecurity. Probably the deterioration of job condition is seen as less threatening (Berntson and Marklund, 2007; De Cuyper et al., 2008).

In the same way, the perception of having the possibility to find a new job increased the focus search (i.e. submission of CVs in a targeted manner) also positively affecting the probability of finding a new job.

In light of these considerations, we formulated our further hypotheses.

Hypothesis 4: for workers in involuntary occupational transition, perceived employability is positively associated with physical and mental health status and with the re-employment.

Hypothesis 5a: link between dispositional employability and physical and mental health is mediated by perceived employability.

Hypothesis 5b: link between dispositional employability and re-employment is mediated by perceived employability.

4 Personal Resources of Employability and Attitude Towards Services of Re-Employment

Fugate and Kinicki (2008) have theorized, but not empirically verified, that dispositional employability is associated with a greater willingness on the part of people using the services of outplacement and this consequently increases the probability of re-employment. Studies about attitudes have largely shown how attitudes can influence beliefs about an object/behaviour (Ajzen, 2001). With reference to these studies, we investigated the beliefs about the usefulness of outplacement services, considered as a possible antecedent of behaviour in the use of these services: according with Fugate and collaborators, we hypothesized that workers with high employability level are more open towards outplacement services, and they are more convinced of their usefulness. The positive regard might have a positive impact on physical and mental health because it may decrease feelings of loneliness in managing the transition from one organization to another. Also, beliefs in services could increase the probability to be re-employment because it could lead to a greater use of such services.

Hypothesis 6: dispositional employability level is positively associated with beliefs about the usefulness of outplacement services.

Hypothesis 7: beliefs about the usefulness of outplacement services are positively associated with physical and mental health and with the probability to be re-employed.

Hypothesis 8: beliefs about the usefulness of outplacement services mediate the relationship between dispositional employability, physical and mental health and re-employment.

5 The Study

The present study is part of a great research about the efficacy of *Welfare-to-Work* interventions. Here the aims are:

- 1) to investigate dispositional employability construct as a second-order latent multidimensional construct that represents the common ground among independent latent dimensions in order to verify its applicability in situations of involuntary job transitions;
- 2) to explore the relationship between dispositional employability and the two most important results of a process of relocation: physical and mental health and re-employment;
- 3) to analyse the mediating role of the perceived employability and the perceived usefulness of outplacement services in the relationship between dispositional employability and the two results.

5.1 Context of the Study

In November 2008 Farindustria and National Trade Union Organisation (OO.SS.) signed an agreement to implement a *Welfare-to-Work* project, called Welfarma. This project intended to promote retraining and re-employment of staff involved in corporate crises that were affecting the Pharmaceutical Industry. The Welfarma model set that dismissed workers, along with monetary incentives, were offered professional retraining and replacement programs. Membership was voluntary for both workers and companies.

In the period June 2009 – June 2010, 7 pharmaceutical companies joined the Welfarma project and offered dismissed workers the opportunity to use outplacement services. 303 accepted this offer.

5.2 Procedure and Survey Participants

The survey instrument used was a questionnaire, available online from 14 June 2010 to 20 September 2010. Invitation to answer the questionnaire was sent to the 303 workers through the outplacement services. 101 employees responded to the questionnaire (*redemption rate*: 30%).

The group of respondents consisted mainly of males (59%), with a average age of 46.4 years (50 for males and 42 for females), with a high level of education (58% graduates), residing in northern Italy (63%). 70% were married or cohabiting, 69% with at least 1 child; 41% were the only income earner of the family. From the point of view of employment, almost all respondents had a permanent contract (96%) and had worked in pharmaceutical industry for over 10 years (73%), mainly as pharmaceutical sales representative (74%).

At the moment of the survey 37% of respondents declared they had found a new job, while 63% were still unemployed. The average duration of unemployment was 7.65 months (SD = 5.09 months and variation coefficient = 0.67) for the unemployed and of 6.99 months (SD = 5.38 months, and variation coefficient = 0.77) for the employed. The subgroup of respondents had social and personal characteristics equivalent to the total number of workers surveyed.

5.3 Measures

The following variables were used in the analysis.

Proactivity in job and career (5 items; Cronbach's $\alpha = .86$). This variable is defined operationally as the extent to which an employee is active in collecting information relevant to his/her job and career. Scale was adapted from Fugate and Kinicki (2008) (examples: "I've always kept up to date on developments in my profession"; "I've always kept informed about the policies of the company with which I was working").

Self-efficacy in managing changes at work (6 items; $\alpha = .89$). Indicates the degree to which the worker feels able to face changes in the work, to manage emotional difficulties, to identify market opportunities appropriate to his/her skill. The scale has two items adapted by Fugate and Kinicki (2008) and four items taken by the Italian version of the General Self-Efficacy Scale (Sibilia et al., 1995) adapted to job changes (examples: "I feel able to manage changes in my work"; "No matter what happens in my job, I am usually able to handle it").

Social capital (3 items; $\alpha = .66$). According with McArdle et al. (2007) it is measured with 2 items related to networking with colleagues and 1 item related to support from one's family ("I know I can rely on the support of family and friends in times of difficulties related to my work").

Dispositional employability (14 items, $\alpha = .90$). Scale of measure for personal resources of employability includes the same items of *work and career proactivity*, *self-efficacy in managing changes at work* and *social capital*. The instructions common to all items were: "Referring to work context, and in particular to changes that are affecting or affected your working life, indicate how you recognize the following statements as true for you". Items are evaluated using Likert's scale with 5 steps (completely untrue – completely true).

Perceived employability (3 items; $\alpha = .657$; Likert's scale with 5 steps). It is measured with 3 items, adapted from Berntson and Marklund (2007) (example: "In current labour market there are employment opportunities for people with my skills").

Perceived utility of outplacement services (9 items; $\alpha = .816$). It measures believes about the usefulness of relocation support services with regard to: finding a job, increasing knowledge networks, reducing tension and anxiety, making people aware of one's skills and job prospects, enhancing personal skills in managing changes (Likert's scale with 5 steps from *completely disagree* to *totally agree*).

Social-personal and employment background: Age, gender, marital status, level of education, residence (divided into 3 levels: North, Central, South and Islands), children (2 levels: no child, at least 1 child), number of earners (2 levels: 1, more than 1) and seniority in pharmaceutical industry.

Time of unemployment. This is the time of lack of work from when the pact of mobility was signed with the company until the date of completion of the questionnaire for those who are

still unemployed, and until the date of the new job, for those who have relocated. It is an information self-reported (months in classes).

Dependent variables considered in the study are:

Replacing: in 2 levels (having or not having found a new job);

Physical and mental health (10 items; $\alpha = .95$). It is measured, according to Vuori and Vinokur (2005), with DEPS scale, based on the Hopkins's checklist, where the subject is asked to indicate how often in the last month has occurred ten particular symptoms (examples, insomnia, apathy) (Likert's scale with 5 steps: never, seldom, sometimes, often, very often).

Values of Cronbach's alpha are all acceptable (greater than or equal to 0.7) and they show a good reliability of the proposed items.

5.4 Data Analysis

The analysis of the nature of dispositional employability construct and of relations between the different variables considered were conducted through the use of structural equation models, particularly the PLS Path Model is used with the Smart PLS 2.0 software (<http://www.smartpls.de/>). This approach is free from distributional assumptions on the variables analyzed and it is recommended when the number of observations is not large, and in case it is lower than the number of considered variables. Structural equation models, also called path analysis models, allow to study the relationships among latent, not directly observable variables. These models are characterized by a dual structure: in addition to a measurement model, which analyzes the relationships among latent variables and manifest variables, associated with and used to rebuild them, a structural model is considered. This describes the path of relations between latent variables, as formulated by the theory. Relations between latent and manifest variables were defined using a reflexive model (Esposito Vinzi et al., 2010). Missing data were imputed using an algorithm implemented in the software. The significance of the parameters of the model was assessed by the bootstrap re-sampling, using at least 200 samples of size 100.

6 Results

6.1 *Evaluation of the nature of the latent construct of dispositional employability*

Before testing our hypotheses, we proceeded by testing the proposition of Fugate and Kinicki (2008): according to them dispositional employability is a second-order multidimensional construct linked to different latent dimensions, each of which has an a priori, and unique, set of items as indicators. This construct is therefore considered as a higher level factor, or second order, which represents the common area to its latent dimensions. In the questionnaire the concept of dispositional employability was observed with 14 items. And exploratory factor analysis was conducted to assess the internal consistency of the construct and the reliability of the scale proposed. It has been used the principal components as method of extracting with Varimax rotation and Kaiser normalization. Factor analysis confirmed the hypothesized structure, showing the presence of three latent factors (self-efficacy, proactivity, social capital). The percentage of variance explained by the three factors is equal to 66.87%.

The problem that now arises is the following: whereas there are three latent factors underlying the concept of employability, it is natural to ask whether such a construct is indeed a latent multidimensional construct of higher order, as proposed by Fugate and Kinicki (2008), able to synthesize these factors and to represent them more parsimoniously.

For this purpose a structural equation model is constructed, in which employability is linked to the state of physical and mental health in three forms of relationship:

1. all the 14 items are directly related to the latent variable employability;
2. only the three latent variables self-efficacy, proactivity and social capital are considered;
3. the three latent factors self-efficacy, proactivity and social capital are related to dispositional employability by the hierarchical component model or repeated indicators approach (Wold, 1982; Lohmöller, 1989; Chin et al., 2003).

The more appropriate model is the third, which considers the three latent variables self-efficacy, social capital and proactivity related to dispositional employability. Links between variables are all significant (path coefficients linking self-efficacy, social capital and proactivity to dispositional employability are 0.563, 0.214 and 0.337, while that between dispositional employability and physical and mental health is 0.378) and the R^2 is equal to 0.143; in literature a value of the index R^2 greater than 0.1 is acceptable (Duarte and Raposo 2010). For this reason model 3) (repeated approach) will be considered in following analysis. The value of AVE indices, which are used to measure the percentage of variance explained by each factor and which are applied within each latent construct, calculated for all the five latent

variables considered (Table 1), are greater than 0.5, thus confirming the goodness of the model (Henseler et al., 2009).

<i>Latent Variables</i>	<i>AVE index</i>
Self efficacy	0.724
Social capital	0.631
Proactivity	0.632
Dispositional employability	0.537
Physical and mental health	0.738

Table 1: *AVE indices*

This conclusion confirms the hypothesis proposed by Fugate and Kinicki (2008) and allows to consider dispositional employability as a latent multidimensional construct related to three dimensions: self-efficacy, proactivity and social capital.

Figure 1 presents an useful tool in the planning of interventions, reporting the scores given by the variables self-efficacy, proactivity and social capital and their effect on dispositional employability: the variable that most affects the dispositional employability is self-efficacy, but it takes a score lower than proactivity. Actions to improve self-efficacy could have a significant impact just on dispositional employability.

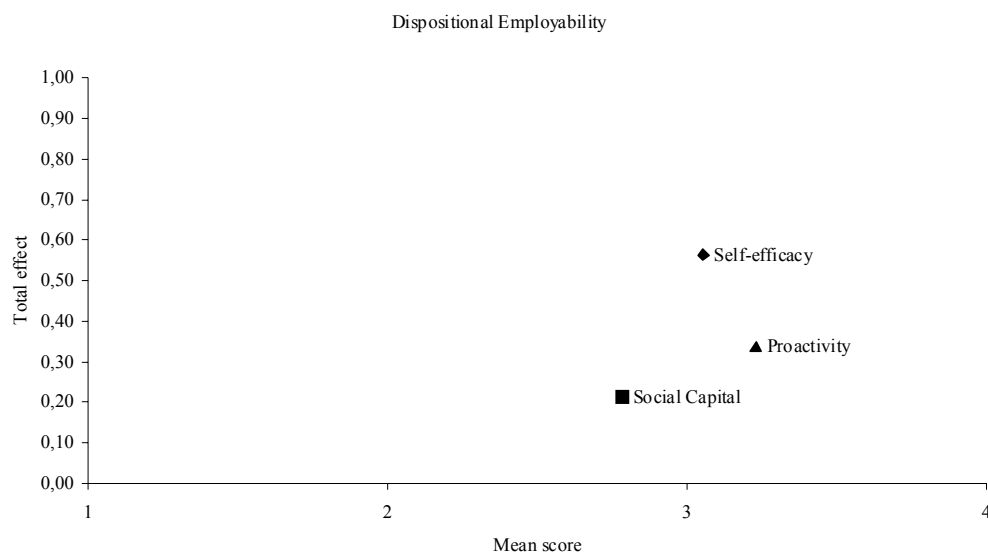


Figure 1: *Scores vs. impact for dispositional employability factors*

The same analysis was carried out considering the relocation as the dependent variable: the elaborations made did not lead to a significant link between dispositional employability and relocation.

6.2 *Employability and outplacement*

Whereas relationship between dispositional employability and relocation was not significant, as shown in the previous paragraph a logistic regression model was applied to evaluate the

link between outplacement and social-personal and context variables (gender, age, marital status, education level, area of residence, presence of children, number of earners, stay in pharmaceutical industry). Variables with significant effect on the probability of relocate are: gender (being male increases the probability to be relocate; coefficient $\beta_M = 2.317$, sig = 0.000), area of residence (being domiciled in the North increases the probability to be relocate; coefficient $\beta_N = 1.993$ sig = 0.001) and age (belong to the higher class of age decreases the probability to be relocate; $\beta_3 = -1.755$, sig = 0.005). R^2 of Cox and Snell = 0.285; R^2 of Nagelkerke = 0.392.

The relationships between dispositional employability and physical and mental health are now considered, assuming a mediating role of perceived employability and of perceived utility of services. Table 2 shows correlations between the latent variables examined.

		<i>Physical and mental health</i>	<i>Self efficacy</i>	<i>Social capita</i>	<i>Proactivity</i>	<i>Dispositional employability</i>	<i>Perceived employability</i>	<i>Perceived utility of services</i>
<i>Physical and mental health</i>	Pearson correlation Sig.	1						
<i>Self efficacy</i>	Pearson correlation Sig.	.284** .006	1					
<i>Social capital</i>	Pearson correlation Sig.	.239* .022	.604** .000	1				
<i>Proactivity</i>	Pearson correlation Sig.	.068 .530	.561** .000	.583** .000	1			
<i>Dispositional employability</i>	Pearson correlation Sig.	.248* .021	.898** .000	.789** .000	.830** .000	1		
<i>Perceived employability</i>	Pearson correlation Sig.	.231* .028	.297** .004	.302** .003	.170 .114	.339** .002	1	
<i>Perceived utility of services</i>	Pearson correlation Sig.	.257* .015	.293** .005	.291** .006	.080 .462	.231* .035	.413** .000	1

** . Correlation is significant at 0,01 (2-ties). * . Correlation is significant at 0,05 (2-ties).

Table 2: Correlations

Applying the model with physical and mental health as dependent variable, through an iterative procedure (step by step), removing progressively less significant links, the following formulation of the final model is obtained (Figure 2). The variable *time of unemployment* was also considered, but it was later removed because it showed not significant links with the other variables.

Path coefficients in Figure 2 represent standardized regression coefficients, which connect latent variables each others and quantify the direct impact of each explanatory variable on the concepts to which it is linked by causality constrained.

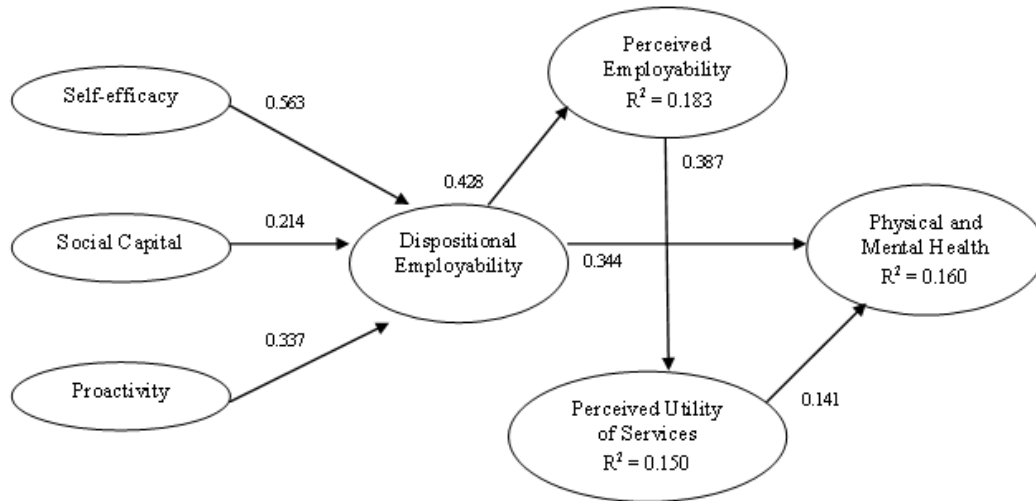


Figure 2: Estimation of the structural model

Figure 2 shows that dispositional employability has a fairly direct impact on physical and mental health, with a coefficient of 0.344, and a direct effect on perceived employability represented by a coefficient of 0.428. Other way, perceived employability directly affects perceived utility of services (with coefficient equal to 0.387), which weights (albeit in the limit of significance) on physical and mental health (coefficient equal to 0.141). So, total effect of dispositional employability on physical and mental health is equal to 0.367, showing a moderate role of the variables perceived employability and perceived utility of services in mediating. Nevertheless, there is not a significant link between dispositional employability and perceived utility of services. Total effect is the indirect effect mediated by the intervention of perceived employability (0.166).

R^2 indexes, expressing for each latent construct how much of the overall variability is explained by its linear dependence from other latent constructs, are equal to 0.183 for perceived employability, 0.150 for perceived utility of services and finally 0.160 for physical and mental health. An index of overall goodness of fit for the model, suggested by Amato et al. (2004) and by Tenenhaus et al. (2005), which takes into account both measure that structure side, is the GoF, the geometric mean of the average communality and of the average R^2 , which in the proposed model is equal to 0.25. According to the classification of Wetzels et al. (2009), these values are mildly acceptable.

Figure 3 shows scores of variables dispositional employability, perceived employability and perceived utility of services, and their total effects on physical and mental health. The effect

of perceived employability and perceived utility of services on physical and mental health is irrelevant with respect of the dispositional employability ones.

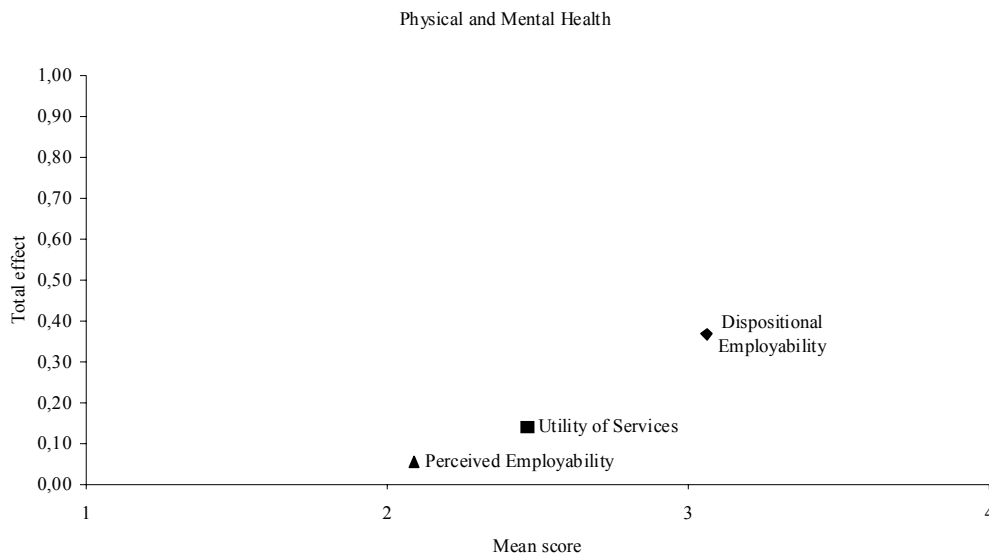


Figure 3: Score vs. impact of the variables dispositional employability, perceived employability and perceived utility of services on physical and mental health

The significant moderator variables were entered into the model using a multi-group approach (Henseler and Fassott, 2010). In particular, the factor scores produced by the PLS Path Model was used to summarize the values of the variable physical and mental health, and a multiple regression model was applied using as predictor social-personal and of context variables (gender, age, marital status, education level, area of residence, presence of children, number of earners, stay in pharmaceutical industry, employment status). Only the area of residence was significant on physical and mental health (being domiciled in the North improves physical and mental health; coefficients $\beta_N = 0.166$; sig = 0.032).

To assess the effect of moderating variables in the model, the analysis should be replicated on subgroups that differ by area of residence. In the context of comparisons between groups, comparison of the estimated models for different groups of observations can be considered as a special case of the effects of moderation, in which the grouping variable is nothing more than a categorical moderator variable. In this case, however, when subgroups are analyzed there is not an adequate abundance of data (for example, those who have participated in training activities are only 32 and the residents in Central Italy are just 15).

However it should be noted that, in the subgroups with a sufficient number of data that allows the processing, the dispositional employability construct, as a representation of the three latent underlying variables self-efficacy, proactivity and social capital, is always supported.

7 Discussions and Conclusions

The first objective of this study was to explore the opportunity to consider dispositional employability as a latent multidimensional construct, and not a mere aggregate of parts, even

in the context of workers who deal with transitions from one organization to another due to lay off. The analysis confirmed the opportunity to consider dispositional employability as a global factor: the second-order factor is related to three dimensions such as self-efficacy, proactivity and social capital, which summarizes parsimoniously.

The second objective was to investigate the links between dispositional employability, relocation and effective physical and mental health. Referring to the relationship between dispositional employability and relocation, the analysis does not confirm the hypothesis that workers with higher internal employability are also those who find work.

This result is in line with what emerges from the analysis of Meyers and Houssemand (2010) who, through a longitudinal design, have considered the relative impact of social and psychological variables (i.e. self-esteem, general self-efficacy) predicting relocation, underlying how, at 6 months after registration with the outplacement service, none of the psychological variables foretold probability of relocation. In our study, characterized by an average time of unemployment around 6 months, men, younger people and those living in northern Italy have more easily found a new job. As highlighted by King et al. (2005), our results invite to rethink the metaphor of the mentality without limits which push to focus on the individual and his/her propensity to mobility, neglecting the complex interactions between the worker and the structural limits that can reduce opportunity of movement.

The hypothesis concerning the link between dispositional employability and physical and mental health is confirmed. Regardless their success in finding a job, workers with more personal employability resources lived with more serenity the transition process. The dispositional employability construct is therefore a useful reference to understand dynamics of welfare during the not voluntary transition process, in particular with reference to the dimensions of self-efficacy in managing change at work and dimensions of proactivity.

Analyses performed have also confirmed the hypothesis that dispositional employability is positively associated with perceived employability. In line with the results of Zickic (2006), workers who are more able to manage changes in work and are actively oriented to the professional future, have more perception to have a spendable professionalism, so they can find alternative employment and reinvest themselves professionally.

Unlike suggested by Fugate and Kinicki (2008), the level of individual employability resources does not seem to contribute directly to create positive expectations for employment agencies. Availability to the services is mediated by perceiving opportunities for relocation in labour market. In other words, the more a worker thinks to be in a frozen labour market, without possibilities for his/her professionalism, the more he/she tends to regard outplacement services as tools that are not an effective support. This result suggests a possible risk to the perception of having difficulties in transition: only someone who can hardly see himself unemployed could also reduce personal investment in services or activities proposed by operators.

Another interesting result concerns the absence of a direct link between perceived employability and well-being, that is in part possible through believes about the utility of services for relocation: the belief to have an interesting skill does not seem to be sufficient to

protect workers in mobility against anxiety and depression feelings. We can hypothesize that when finding a new job is a consequence of a not voluntary situation, the major worries are not only for the presence of alternative opportunities, but also the availability of channels and tools to intercept them: people seeing in outplacement services a compass to know and to master channels and tools seem to limit these concerns.

7.1 *Limitations of the study and future directions of research*

The limits of this study relate primarily to the cross-sectional design that does not allow causal interpretations. For example, perceived employability may be influenced by the levels of physical and mental health: some aspects of health, such as components of depression, may reduce the cognitive and emotional perception of job alternatives and make to overbear an image of oneself as low spendable. However, previous longitudinal studies (Hellgren and Sverke, 2003; Berntson and Marklund, 2007) suggest that to consider dispositional and perceived employability as an antecedent of health is a plausible hypothesis. Subsequent research could explore whether between perceived employability and health there is a reciprocal relationship.

A second limitation concerns sample size and its specificity, which makes impossible to generalize the results: our participants were all professionals with a high level of education from a single industry sector, the pharmaceutical industry, which traditionally handles the commissioning mobility of their workers with cheap to encourage voluntary redundancy much more consistent than other sectors. To overcome the exploratory nature of this study is therefore our intention to continue with larger samples and balanced in terms of business sectors.

Since the interest of the dispositional employability construct in the processes of transition to employment, focused by our study, future research with longitudinal design would study relations between internal employability resources and job search strategy that, according to some surveys (Koen et al., 2010), can be an important predictor for next employment.

Another aspect to be explored regards the link between personal employability resources and the path of guidance and support. It would be interesting to understand if employability resources change during the transition process and which aspects of career counselling foster their transformation and their growth.

7.2 *Impact on intervention*

Preventing damage to health associated with unemployment, by early identifying workers with depressive tendencies, is a fundamental purpose of employment agencies: difficulty to mourn the loss of a job can lead to emotionally withdraw and to disclaim finding a new employment, risking to increase transition phase. To achieve this goal it is important that operators identify risk factors and employability resources on which to leverage.

With the exception of some very interesting experiences (Natali, 2008; Guglielmi and Natali, 2009), in the Italian system of employment agencies is not currently available and shared a system of evaluation of employability profiles. Our study may offer some suggestions to

identify dimensions on which to start the joint work of advising for the transition. Often a too technical approach can be found in practical outplacement services, characterized by actions limited in time, focused exclusively on providing information (Heppner and Heppner, 2003). These practices can increase confidence in the job search and in the intensity of job search techniques (i.e. read newspapers and websites, or send Curriculum Vitae), but may fail to contain the adverse physical and mental health effects caused by the loss of job. Moreover, these practices are based on the idea that the intensity of research activities is a predictor of the success of re-employment, but recent meta-analysis showed that the empirical evidence in support of this report are not sufficient (Sverko et al. , 2008). In line with Brown et al. (2003), our study highlights the need for career counsellors to put more attention to building a working and support alliance, distributed and sustained over time, able to act on two fronts: on the one hand, to enable the worker in mobility to build a correct perception of his/her external employability, or marketability of his/her work, helping to understand more clearly what kind of help the service can offer too, deconstructing stereotypes and mistrust, on the other, encouraging a process of self-monitoring of one's interior employability in order to promote ability to manage with changes in work and career.

References

- AJZEN I. (2001). *Nature and operation of attitudes*. Annual Review of Psychology, 52, 27-58.
- AMATO S., ESPOSITO VINZI V., TENENHAUS M. (2004). *A global goodness-of-fit index for PLS structural equation modeling*. Oral communication to PLS Club, HEC School of Management, France, March 24.
- BAGSHAW M. (1996). *Creating employability: how can training and development square the circle between individual and corporate interest?*. Industrial and Commercial Training, 28, 16-18.
- BERNTSON E., MARKLUND S. (2007). *The relationship between perceived employability and subsequent health*. Work & Stress, 21, 279-292.
- BERNTSON E., SVERKE M., MARKLUND S. (2006). *Predicting perceived employability: Human capital or labour market opportunities?* Economic and Industrial Democracy, 27, 223-244.
- BROWN S.D., RYAN KRANE N.E., BRECHEISEN J., CASTELINO P., BUDISIN I., MILLER M., EDENS L. (2003). *Critical ingredients of career choice interventions: More analyses and new hypotheses*. Journal of Vocational Behavior, 62, 411-428.
- CHIN W.W., MARCOLIN B.L., NEWSTED P.N. (2003). *A partial least square latent variable modelling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study*. Information Systems Research, 14, 189-217.
- DE CUYPER N., BERNHARD-OETTEL C., BERNTSON E., DE WITTE H., ALARCO B. (2008). *Employability and employees' well-being: Mediation by job insecurity*. Journal of Applied Psychology: An International Review, 57, 488-509.

- DI FABIO A. BERNAUD J.L. (2008). *The help-seeking in career counseling*. Journal of Vocational Behavior, 72, 60-66.
- DUARTE P.A.O., RAPOSO M.L.B. (2010). *A PLS model to study brand preference*. In V. Esposito Vinzi, W.W. Chin, J. Henseler e H. Wang. *Handbook of partial least squares. Concepts, methods and applications*. Springer Handbooks of Computational Statistics, New York.
- ESPOSITO VINZI V., CHIN, W.W., HENSELER, J., WANG H. (2010). *Handbook of partial least squares. concepts, methods and applications*. Springer Handbooks of Computational Statistics, New York.
- FORRIER A., SELS L., STYNEN D. (2009). *Career mobility at the intersection between agent and structure: a conceptual model*. Journal of Occupational and Organizational Psychology, 82, 739-759.
- FUGATE M., KINICKI A.J., ASHFORTH B.E. (2004). *Employability: a psycho-social construct, its dimensions, and applications*. Journal of Vocational Behaviour, 65, 14-38.
- FUGATE M. (2006). *Employability in the new millennium*. In J. H. Greenhaus e G. A. Callanan (a cura di), *Encyclopedia of Career Development*. SAGE, Thousand Oaks, CA.
- FUGATE M., KINICKI A.J. (2008). *A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change*. Journal of Occupational and Organizational Psychology, 81, 503-527.
- GOWAN M.A., NASSAR-MCMILLIAN S.C. (2001). *Examination of individual differences in participation in outplacement program activities after job loss*. Journal of Employment Counseling, 38, 185-196.
- GUGLIELMI D., NATALI C. (2009). *L'occupabilità e la sua valutazione nel tempo della crisi*. Professionalità, 106.
- HALL D.T. (2004). *The protean career: A quarter-century journey*. Journal of Vocational Behavior, 65, 1-13.
- HALL D. T., CHANDLER D. E. (2005). *Psychological success: When the career is a calling*. Journal of Organizational Behavior, 26, 155-178.
- HELLGREN J., SVERKE M. (2003). *Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modelling*. Journal of Organizational Behavior, 24, 215-236.
- HENSELER J., FASSOTT G. (2010). *Testing moderating effects in pls path models: An illustration of available procedures*. In V. Esposito Vinzi, W.W. Chin, J. Henseler e H. Wang. *Handbook of Partial Least Squares. Concepts, Methods and Applications*. Springer Handbooks of Computational Statistics, New York.
- HENSELER J., RINGLE C.M., SINKOVICS R.R. (2009). *The use of partial least squares path modelling in international marketing*. Advances in International Marketing, 20, 277-319.
- HEPPNER M.J., HEPPNER P.P. (2003). *Identifying process variables in career counselling: A research agenda*. Journal of Vocational Behavior, 62, 429-452.
- ILES P. (1997). *Sustainable high potential career development: a resource-based view*. Career Development International, 2, 347-353.

INKSON K., ARTHUR M. B. (2001). *How to be a successful career capitalist*. Organizational Dynamics, 30, 48-62.

INPS, Istituto Nazionale di Previdenza Sociale (2011). *Rapporto annuale 2010*. In: <http://www.inps.it/portale/default.aspx?itemdir=7538> (27/10/2011).

JÖRESKOG K.G., SORBOM D. (2006). *LISREL 8.8 for Windows [Computer software]*. Scientific Software International.

KING Z., BURKE S., PEMBERTON J. (2005). *The 'bounded' career: an empirical study of human capital, career mobility and employment outcomes in a mediated labor market*. Human Relations, 58, 981-1007.

KOEN J., KLEHE U.C., VANVIANEN A.E.M., ZIKIC J., NAUTA A. (2010). *Job-search strategies and reemployment quality. The impact of career adaptability*. Journal of Vocational behaviour, 77, 126-139.

LATAACK J.C., KINICKI A.J., PRUSSIA G.E. (1995). *An integrative process model of coping with job loss*. The Academic of Management Review, 20, 311-343.

LOHMÖLLER J.B. (1989). *Latent variable Path modeling with partial least squares*, Physica-Verlag, Heidelberg.

MARCH J., SIMON H. (1958). *Organizations*. Wiley, New York.

MCARDLE A., WATERS L., BRISCOE J.P., HALL D.T. (2007). *Employability during unemployment: Adaptability, career identity and human and social capital*. Journal of Vocational Behaviour, 71, 247-264.

MCKEE-RYAN F.M., SONG Z., WANBERG C.R., KINICKI A.J. (2005). *Psychological and physical well-being during unemployment: A meta-analytic study*. Journal of Applied Psychology, 90, 53-76.

MEYERS R., HOUSSEMAND C. (2010). *Socioprofessional and psychological variables that predict job finding*. Revue Européenne de Psychologie Applique, 60, 201-219.

NATALI C. (2008). *Per un sistema di profiling sostenibile*. In Agenzia Regionale del lavoro e della Formazione professionale (a cura di). *Crisi occupazionale e riforma dei servizi per il lavoro*. Franco Angeli Editore, Milano.

O'CONNELL D.J., MCNEELY E., HALL D.T. (2008). *Unpacking personal adaptability at work*. Journal of Leadership & Organizational Studies. 14, 248-259.

ROTHWELL A., ARNOLD J. (2007). *Self-perceived employability: development and validation of a scale*. Personnel Review, 36, 23-41.

SAVICKAS M.L. (1997). *Career Adaptability: An integrative construct for life-span, life-space theory*. The Career Development Quarterly, 45, 247-259.

SILLA I., DE CUYPER N., GRACIA F.J., PEIRO J.M., DE WITTE H. (2009). *Job insecurity and well-Being: Moderation by employability*. Journal of Happiness Studies, 10, 739-751.

ŠVERKO O.B., GALIĆ Z., SERŠIĆ D.M. e GALEŠIĆ, M. (2008). *Unemployed people in search of a job: Reconsidering the role of search behavior*. Journal of Vocational Behavior, 72, 415-428.

- TANUCCI G. (2010). *Outplacement*. In P. Argentero, C.G. Cortese e C. Piccardo (a cura di).. *Psicologia delle risorse umane*. Raffaello Cortina Editore, Milano.
- TENENHAUS M., ESPOSITO VINZI, V., CHATELIN, Y.M., LAURO, C. (2005). *PLS Path Modeling*. *Computational Statistics and Data Analysis*, 48, 159-205.
- THIJSSSEN J.G.L., VAN DER HEIJDEN, B., ROCCO, T.S. (2008). *Toward the Employability--Link Model: Current Employment Transition to Future Employment Perspectives*. *Human Resource Development Review*, 7, 165-183.
- VAN DER HEIJDEN B. (2002). *Pre-requisites to guarantee life-long employability*. *Personnel Review*, 31, 44-61.
- VAN DER HEIJDE C. M., VAN DER HEIJDEN B. (2006). *A competence-based and multidimensional operationalization and measurement of employability*. *Human Resource Management*, 45, 449-476.
- VUORI J., VINOKUR A.D. (2005). *Job-search preparedness as a mediator of the effects of the Tyohon Job Search Intervention on re-employment and mental health*. *Journal of Organizational Behavior*, 26, 275-291.
- WETZELS M., ODEKERKEN-SCHRÖDER G., EVAN OPPEN C. (2009). *Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration*. *MIS Quarterly*, 33 (1), 177-195.
- WOLD H. (1982). *Soft modeling: The basic design and some extensions*. In K.G. Jöreskog e H. Wold (edited by). *Systems under indirect observation: Causality, Structure, Prediction*. Vol. 2. North-Holland, Amsterdam.
- ZIKIC M., KLEHE U.C. (2006). *Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality*. *Journal of Vocational Behavior*, 69, 391-409.