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Employability and Key Outcomes in Times of Severe Economic Crisis: The Role of Career Orientation

Research serves as the basis for the construction of a model of the antecedents and consequences of employability within an organization undertaking significant change as a response to severe financial crisis. The study was conducted in a state–owned public utility in Greece and involved 157 participants. The central idea was that a boundaryless career mindset and a protean career orientation would be positively related to employability, which in turn would be related to openness towards organizational change and the willingness to expend effort at work. Results confirmed the hypothesized relationship of protean career orientation and boundaryless mindset with employability. Furthermore, in line with expectations, employability was related to the willingness to expend effort and also mediated the relationship of boundaryless mindset and protean career orientation with it. On the other hand, employability was not related to openness towards change and the hypothesis for a moderating role of perceived organizational support did not materialized. The findings are discussed within the context of career and employability theory as well as in terms of their implications for the management of the workforce in times of severe change.

Key words: employability, financial crisis, career orientation, protean, boundaryless, restructuring, motivation, openness towards change

Employability refers to an individual’s adaptability with respect to work that enables him or her to find and seize employment and career opportunities inside or outside the current workplace or to rebound from a period of voluntary or involuntary unemployment [e.g., Fugate, Kinicki, and Ashforth, 2004; Van der Heijde and Van der Heijden, 2006]. Though important under any circumstances and economic conditions, employability has acquired particular significance in the present era because of reasons that include reduced employment certainty due to the constant restruc-
uring of firms that is typically accompanied by redundancies, transfers and changes in job content, the shift of responsibility for career management from employers to employees, technological advances that lead to the disappearance of certain jobs with a parallel creation of jobs of a different nature [Baruch and Bozionelos, 2010]. Under such circumstances, the ability to find and take advantage of employment opportunities becomes essential, hence, employability becomes a key quality for individuals who are in the job market. Not only individuals, however, firms and governments also have an interest in the employability of their workforce because an employable workforce is inherently more flexible and more contributive to firm and country growth [McQuaid and Lindsay, 2005; Nauta, Van Vianen, Van der Heijden, Van Dam, and Willemsen, 2009]. Given its pivotal importance, therefore, the identification of factors that antecedent employability as well as the specific consequences of employability becomes essential [Van der Heijden and Baker, 2010].

The present work has contributed in this direction by developing and testing a model that posed career orientation as an antecedent of employability and openness towards organizational change and willingness to expend effort as consequences of it. The model was tested in an organization that was undertaking extensive restructuring amidst severe financial crisis, which added to the contribution of the study given that employability and its outcomes acquire even greater importance under such conditions.

**Model Development**

**Protean and Boundaryless Career Orientation as Antecedents of Employability.**

Considering that employability is by definition linked with career development and enhancement [Van der Heijden, De lange, Demerouti, and Van der Heijde, 2009], it is sensible to expect that it should relate to the individual’s career orientation. In particular, individual differences in employability should be a function of their differences in propensity to lead their careers in particular ways. Two notions of career orientation appear relevant in this sense—the protean and the boundaryless. The concepts of boundaryless and protean career represent two of the most celebrated notions in career theory.

**Protean Career**

The idea of protean career, and consequent career orientation, was introduced in the nineteen–seventies [Hall, 1976], but it attracted the attention of scholars much latter, in the nineteen–nineties [Hall and Mirvis, 1996]. The reason for its initial
overlooking was that the nineteen-seventies were still a period of relative economic stability for the “Western” world, but also in other parts of the world such as the Soviet Union and the People’s Republic of China. During such a period, the qualities of protean career, such as ability to drive one’s career by values and personal initiative, were not as critical. This was because navigating one’s way in the world of work was relatively simple. Indeed, the nineteen-seventies were still a period of the dominance of the notion of the traditional career—a career relatively free of “trouble” and characterized by employment security and steady upwards moves within large bureaucratic structures that would manage careers on behalf of employees while demanding little initiative on their part [e.g., Arthur and Rousseau, 1996; Baruch and Bozionelos, 2010]. Movement across functions or organizations did exist during that period, but it was typically voluntary and not a result of forces such as redundancy or redeployment. That changed after the nineteen-eighties as a result of increased competition and immense reshuffling in the global political landscape (the dissolution of the Soviet Union with its consequent adoption of capitalist economic models by the resulting countries as well as the parallel gradual introduction of economic reforms in People’s Republic of China).

Protean career refers to the extent to which individuals, or career actors, (a) drive their careers by their own values (that is, what they themselves consider worthwhile and important) and (b) direct their careers by personal choice and initiative rather than relying simply on employers, forces of the environment, and “chance” [Briscoe and Hall, 2006; Hall, 2004]. As already noted, the notion of protean career seems to fit very well with the environment that was shaped after the nineteen-eighties in pretty much the whole world and is characterized by employment uncertainty and the need for frequent moves.

To successfully lead one’s career in this era, employability is needed and a protean career orientation should be beneficial for employability. Indeed, taking the initiative in the development of one’s career should make it more likely to scan the environment in order to identify work opportunities, find such opportunities, and move towards seizing them. This is critical in employability [e.g., van der Heijde and van der Heijden, 2006]. Furthermore, a greater degree of self-directedness should make it more likely for individuals to seek, by themselves, opportunities for updating and upgrading skills and for the acquisition of knowledge in domains that are demanded by the labor market, which should also maintain or augment their employability. Similarly, following one’s personal values in career choices should make it more likely to set career goals that are intrinsically appealing and rewarding and, as a consequence, the likelihood to persevere in the achievement of these goals should be greater, which should also be beneficial for employability. In accordance
with this line of reasoning, protean career orientation has been found to relate to greater pro–activity in career enhancing acts [De Vos and Soens, 2008]. Therefore, the following hypothesis has been posed:

Hypothesis 1: Protean career orientation will be positively associated with perceived employability.

Boundaryless Career

The notion of boundaryless career was introduced as a direct response to the rapidly changing economic conditions of the nineteen–eighties that led to organizational reshuffling with consequent instability in the labor market that impacted career patterns. However, changes in individual career mindsets brought about by an increase in individualism also rendered people less loyal towards their employers if this could serve their own career interests and aspirations [Baruch and Bozionelos, 2010; Reitman and Schnier, 2008]. The definition of boundaryless career has gone through a process of refinement over the years. Current thinking considers it as reflecting (a) mental flexibility as far as career changes are concerned as well as psychological preparedness and moving across organizational, job, and occupational or professional boundaries as acts of adaptation to environmental contingencies, and (b) actual movement across such boundaries [Briscoe and Hall, 2006; Lazarova and Taylor, 2009; Sullivan and Arthur, 2006].

Boundaryless career orientation, and in particular the boundaryless mindset, should also be linked to employability. Mental preparedness towards change in the career domain should make the individual more likely to anticipate the need to scan the environment for employment threats and opportunities and to identify such threats and opportunities. Moreover, individuals who have a mindset for change in the work and career domain would be more open to learning new skills, to updating existing skills, and even to changing their job content, which should also enhance their employability. Therefore, the following hypothesis has been posed:

Hypothesis 2: The boundaryless career mindset will be positively associated with perceived employability.

Interaction between Protean and Boundaryless Career Orientation

Apart from individual relationships with employability, an interactive effect of protean career orientation and the boundaryless mindset is also a logical assumption. Indeed, a combination of strong self–direction, value drive, and preparedness to cross organizational or job domains should be associated with uniquely high levels of employability. For example, individuals who are mentally prepared to face changes in the work environment, but also have the capacity to take initiative in order to
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Successfully handle such change, must be more likely to act proactively and identify threats and opportunities earlier. They should also be more capable of preparing themselves (e.g., by acquiring skills or cultivating and using their social capital, e.g., Bozionelos, 2015) to bypass or seize these, respectively, in a timely way. Therefore, the following hypothesis has been posed:

Hypothesis 3: There will be an interaction between protean career orientation and the boundaryless mindset in the sense that strong levels of both of these will be associated with the highest scores on employability.

Consequences of Employability

Openness towards Organizational Change

The openness of employees towards change, which is normally inconvenient and stressing, is a fundamental capacity at any time [Ford, Ford, and D’Amelio, 2008; Hon, Bloom and Crant, 2014; Huang, 2015]. This is especially the case at times of economic downturn that make change imperative. At times of crisis change is normally painful and is likely to necessitate a worsening of work conditions (e.g., working longer hours, assuming additional tasks, and having reduced resources at one’s disposal) as well as a reduction in financial rewards (e.g., lower salary and cuts or elimination of overtime payment and bonuses) along with an implicit reduction in employment certainty. Such situations inevitably cause strain on employees, hence, the degree to which employees are open towards change and willing to embrace it becomes critical for employers if they are to get through the crisis successfully.

Employability should render employees more accepting of and open towards change in the work environment, especially change that is extensive and intense. Indeed, one aspect of employability is personal flexibility that reflects resilience and adaptability to changes in the work environment and to the conditions of the labor market in general [Fugate and Kinicki, 2008; van der Heijde and van der Heijden, 2006]. This automatically means that more employable individuals should report greater openness and willingness to embrace change. Corporate sense, which is another aspect of employability and reflects the extent to which the individual is integrated and involved in the workplace [van der Heijde and van der Heijden, 2006] should also enable greater openness towards change because individuals with greater corporate sense would understand better the need for change, and hence should be more positive towards it. Therefore, the following hypothesis has been posed:

Hypothesis 4: Employability will be positively related to openness towards organizational change.
**Willingness to Expend Effort**

The willingness of employees to expend effort in the work place must also be critical at times of crisis and painful change. Economic crisis creates uncertainty that may reduce employee morale and, hence, capacity to expend effort at work. For example, at times of crisis employees tend to be stressed and anxious, and stress and anxiety reduce the ability to concentrate on tasks and activities [e.g., Robinson, Vytal, Cornwell, and Grillon, 2013]. In addition, the uncertainty caused by crisis is likely to render employees preoccupied with their fate. This can result in a reduction of their ability or willingness to focus on their work and expend effort towards the proper execution of their tasks. Furthermore, when organizations resort to change as a response to crisis it is not unlikely for employees to blame the employer for the situation [e.g., Strebel, 1996] and hence feel less obliged and willing to expend effort in their work.

Employability should ameliorate the negative impact of crisis and consequent change on employee motivation and should render them more willing to expend effort at work. Indeed, personal flexibility should make individuals more able to rebound from the strain of change and pressures caused by the crisis and, hence, more willing to apply themselves at work. Balance, the aspect of employability that relates to the ability of the individual to take care of both personal and organizational needs [van der Heijde and van der Heijden, 2006], along with corporate sense, should render employees more motivated to work. Therefore, the following hypothesis has been posed:

**Hypothesis 5:** Employability will be positively related to willingness to expend effort at work.

The above hypothesis points towards a mediating role for employability in the relationship of career orientation with the employability consequences. Therefore:

**Hypothesis 6:** Employability will mediate the relationship of protean career orientation with openness towards organizational change [H6a] and willingness to expend effort [H6b].

**Hypothesis 7:** Employability will mediate the relationship of the boundaryless mindset with openness towards organizational change [H7a] and willingness to expend effort [H7b].

**Organizational Support**

The extent to which employees perceive that the organization is supportive of them in terms of valuing them, providing resources, and showing care plays a substantial role in the shaping of employee attitudes and behaviors [e.g., Riggle, Edmondson, and Hansen, 2009; Gavino, Wayne, and Erdogan, 2012], especially in times of organizational change [Chen and Wang, 2014]. We have hypothesized that when employees perceive that they are employable they will be more motivated to ex-
pend effort and more open towards organizational change. It is reasonable then to expect that when employees perceive that organizational support towards them is strong their willingness to expend effort and accept change will be especially strong. Employees who perceive that the organization cares about them are more affectively committed towards the employer [Caesens, Marique, and Stinglhamber, 2014]. Therefore, possession of feelings of affection towards the employer and a willingness to expend effort and to accept change should be higher.

Hypothesis 8: Perceived organizational support will moderate the relationship of employability with openness towards change [H8a] and willingness to expend effort [H8b] in such a way that the relationship will be strongest under conditions of high perceived organizational support.

Hypotheses, in the form of a causal path model, are depicted in Figure No. 1.

Figure 1. Hypotheses in visual form

Note: Dotted lines represent interaction effects.

Method

Setting

The setting of the study was a Greek state-owned public utility enterprise and the time of data collection was the end of 2010 and beginning of 2011. That time falls within a period of severe restructuring in all state-owned public utility enterprises as a consequence of the Greek government’s effort to dramatically reduce operational losses, cut costs, and improve efficiency. This was the result of the realization at the end of 2009 that the Greek debt had reached disproportional levels and
could not be managed unless immediate and drastic measures (including severe cost cutting and extensive structural reforms) were taken. Measures assumed in the case of state-owned public utility enterprises included reduction in available budgets, changes in organizational structures, additional supervision and reporting in internal auditing, lowering employee compensation, and compulsory transfer of employees to other parts of the wider public sector. These features make this setting ideal for the present study.

Participants and Procedure

Participants were 157 individuals (126 men and 31 women) who were employed in a state-owned public utility enterprise in Greece. The mean age was 47.89 [SD = 9.05] years and the mean tenure with the employer was 20.89 [SD = 10.09] years. Nearly half of the participants held undergraduate [32.5%] or graduate [21%] degrees and most of them [82.2%] were married. After special permission was given by senior officials, questionnaires, a cover letter in printed form, and an envelope for the return of the completed questionnaires were individually handed out by one of the researchers to a random sample of employees. The cover letter explained briefly and in very general terms the purposes of the study without revealing any details. Completed questionnaires were handed directly back to the researcher in a sealed envelope. In addition, questionnaires were e-mailed in electronic form to a sample of employees whose email addresses were provided by the human resource department of the enterprise. The e-mail contained the same brief and general description of the study, ensured anonymity, and requested that participants return the electronically completed questionnaire to the researcher by e-mail.

Measures

Response format was 5-point unless otherwise stated. The original measures were in the English language and were translated into Greek. For this reason the procedure of translation–back–translation was employed in order to ensure semantic equivalence between the English and the utilized Greek version of the scales [e.g., Behling and Law, 2000]. Special attention was paid in the procedure: translated items were scrutinized by three bilingual employees who cooperated with the researchers in order to ensure that the meaning of the original scale was fully transmitted by the translated items, but were also understood by the employees. There were extensive discussions over the wording, which caused the process to take longer than anticipated, but on the other hand, it assured that the intended meaning was being transmitted. The translated items were then back–translated by a bilingual graduate
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student who was not involved in the research and then the researchers compared the original with the back–translated items.

Employability. Employability was measured using four items adapted from De Vos, Buyens, and Schalk [2003]. Participants indicated the extent to which (1 – not at all, 5 – to a great extent) they were engaged in a number of activities that enhance employability (e.g., “participate in training courses outside working hours,” “enhancing my human capital more than ever in order to perform my duties more effectively”). Cronbach α was 0.76.

Protean career orientation. This was measured applying twelve items from Briscoe and Hall’s [2006; Briscoe, Briscoe, Hall, and DeMuth, 2006] scale. Items assess both value driven career (e.g., “what is most important to me is how I feel about my career success, not how other people feel”) and self–directedness (e.g., “freedom to choose my own career path is one of my most important values”). Combined together the items indicate the degree of protean orientation in one’s career. Cronbach α was 0.79.

Boundaryless career mindset. This was also measured with seven items (e.g., “I enjoy jobs that require me to interact with people in many different organizations”) from Briscoe and Hall [2006; Briscoe et al., 2006]. Cronbach α was 0.75.

Openness towards organizational change. This was measured with an adaptation of Oreg’s [2003] scale of dispositional resistance to change. Respondents were asked to indicate the extent to which “lately” they were positive or negative towards eighteen issues that pertain to change in the work environment (e.g., “I like to do the same old things rather than try new and different ones,” “when I am informed of a change of plans, I tense up a bit,” “I feel a bit uncomfortable even about changes that may potentially improve my life”). Negatively worded items (which indicate resistance to change) were reversed in the scoring process. Cronbach α was 0.82.

Willingness to expend effort. This was measured applying sixteen items adapted from De Vos et al. [2003] that assess perceived obligations of the employee towards the organization. Respondents were asked to indicate the extent to which “under the pressure of the present economic and social conditions” they were felt obliged to engage in a number of acts that indicate their intention to expend effort at work (e.g., “to work extra hours, whether paid or not, to get the job done,” “volunteer to do tasks that are strictly no part of my job if necessary,” “to follow the norms and policies of the organization”). Cronbach α was 0.92. Scores on the scale were strongly correlated with scores on a scale based on the Utrecht work engagement scale [Schaufeli and Bakker, 2004], which provides evidence of concurrent validity and, hence, of the validity of the measure of willingness to expend effort at work.
**Perceived organizational support.** This was measured using sixteen items adapted from De Vos et al. [2003]. The items assess the extent to which respondents perceive that the organizational environment under the present circumstances meets a number of positive conditions (e.g., “a safe environment,” “opportunities to grow,” “good mutual cooperation”). Cronbach α was 0.91.

**Controls.** Demographics were measured with single items and included gender (1 – male; 2 – female), age, educational attainment (1 – elementary school, 2 – secondary school, 3 – university, 4 – graduate degree), marital status (1 – single, 2 – married), number of dependents, tenure with the employer, and time in the present position.

**Qualitative Interpretation of Descriptive Statistics**

These statistics reveal that participants had very long tenures with the organization ($M = 20.89$ years, $SD = 10.09$ years) as well as in their present positions ($M = 15.69$ years, $SD = 11.22$ years). This was not surprising given that the Greek public sector and its affiliated services (such as state–owned public utilities) offers lifetime employment along with (in the past and until the beginning of the financial crisis that started at the end 2009 and is still ongoing) very good provisions (e.g., healthcare) along with minimal input requirements [e.g., see Bozionelos, 2014]. Hence, under normal circumstance those who join stay for the rest of their working lives, especially as Greeks are very adverse to uncertainty [Hofstede, 2001]. On the other hand, it was interesting and rather surprising to find that participants reported moderately strong protean career orientation ($M = 3.88$, $SD = 0.45$) while their boundaryless mindset was also well above the mid–point of the scale ($M = 3.44$, $SD = 0.49$). Given the popular belief within Greece that employees in the pubic and its affiliated sectors are under–motivated and indifferent to their work obligations it was also unanticipated to find that the desire to expend effort at work was moderately high ($M = 3.82$, $SD = 0.78$). Scores on openness to change was near the mid–point of the scale ($M = 3.16$, $SD = 0.56$), which indicates mediocre preparedness or eagerness to embrace change. Nevertheless, this finding was also at odds with the stereotype that depicts employees of state–owned enterprises in Greece as extremely rigid and averse to any change. Finally, participant responses suggested moderately strong perceptions of their employability ($M = 3.82$, $SD = 0.90$), which can be interpreted as substantial confidence in the level of their skills and their ability to find work.
Results

Descriptive statistics and inter-correlations are presented in Table No. 1 (page 23).

Hypotheses Testing

Hypotheses were tested with path analysis using manifest variables that were conducted with the MPlus program [Muthén and Muthén, 1998–2012]. Standardized path estimates were consulted to conclude on hypotheses retention or rejection. Path analysis enables the simultaneous estimation of multiple causal relationships along with testing hypothesized moderation and mediation effects [Kline, 2005]. The sample size of 157 exceeded the recommended minimum sample size of 100 [Bollen, 1989] and the use of manifest variables enabled the significant exceeding of the recommended ratio of five observations per model parameter to-be-estimated [Kline, 2005].

All variables were mean centered and in the calculation of interaction terms (protean career orientation x boundaryless mindset, employability x organizational support) mean-centered values of variables were employed, a technique that reduces multicollinearity and provides less biased parameter estimates [Cohen, Cohen, West, and Aiken, 2003; Aiken and West, 1991]. Controls were included in the analysis on the basis of whether they demonstrated significant correlations with the respective endogenous variables (i.e. employability, openness to organizational change, willingness to expend effort).

The first step in the analysis included an estimation of the model of Figure No. 1 without the interaction and moderation effects. The model in Figure No. 1 assumes perfect mediation by employability of the relationship between career orientation with the two hypothesized outcomes. That model showed unsatisfactory data fit ($\chi^2 [16] = 29.89, p < 0.001; \text{RMSEA} = 0.074, \text{CFI} = 0.920, \text{TLI} = 0.866, \text{SRMR} = 0.038$). For this reason it was modified to include direct paths from protean career orientation and boundaryless mindset towards openness towards change and willingness to expend effort, which in essence means a model that assumes partial mediation by employability. That model showed excellent data fit with a non-significant chi-square index ($\chi^2 [12]= 13.23, \text{ns}$) and very good performance in the other fit indices (RMSEA = 0.026, CFI = 0.993, TLI = 0.984, SRMR = 0.024). Therefore, that model was utilized as the basis for hypotheses testing.

Hypotheses 1 and 2, which suggested a relationship of protean career orientation ($\beta = 0.42, \text{z} = 6.39, p < 0.001$) and boundaryless mindset ($\beta = 0.21, \text{z} = 3.03, p < 0.01$) with employability were both supported. H5, which postulated a positive
relationship of employability with willingness to expend effort, was also supported ($\beta = 0.46, \gamma = 7.46, p < 0.001$). On the other hand, H4 was not supported because the employability–openness path was not significant ($\beta = 0.02, \gamma = 0.21, ns$).

To test H3, which postulated an interaction between protean career orientation and the boundaryless mindset, the interaction term of these variables was added to the model. The interaction effect, however, was not significant ($\beta = 0.04, \gamma = 0.55, ns$), leading to rejection of H3, while the inclusion of the effect substantially reduced the data fitness of the model. Therefore, the interaction effect was removed from subsequent analysis.

Hypothesis 8 postulated a moderating effect of perceived organizational support on the relationship of employability with openness to change [H8a] and willingness to expend effort [H8b]. To test it, perceived organizational support and its product term with employability (i.e. employability x perceived organizational support) were added to the model. None of the moderation effects were significant ($\beta = 0.02, \gamma = 0.21, ns; \beta = -0.03, \gamma = -0.44, ns$, respectively) leading to rejection of both parts of Hypothesis 8. Again, the moderation effects were removed from the model in order to retain its data–fitness. The final model is presented in Figure No. 2.

Figure No. 2. The supported model ($\chi^2 [12] = 13.23, ns$, RMSEA = 0.026, CFI = 0.993, TLI = 0.984, SRMR = 0.024)

Note 1: Only significant relationships are depicted.
Note 2: Standardized parameter estimates are reported.
Note 3: Bent lines (doted for full mediation and solid for partial mediation) represent total effects.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Table No. 1. Descriptive Statistics and Intercorrelations [N = 157]

| Variable                                | Mean | SD  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|-----------------------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1. Employability                        | 3.82 | 0.90|      |      |      |      |      |      |      |      |      |      |      |
| 2. Protean career orientation           | 3.88 | 0.48| 0.48 |      |      |      |      |      |      |      |      |      |      |
| 3. Boundaryless mindset                 | 0.44 | 0.49| 0.34 | 0.31 |      |      |      |      |      |      |      |      |      |
| 4. Openness to change                   | 3.16 | 0.56| 0.02 | -0.04| 0.18 |      |      |      |      |      |      |      |      |
| 5. Willingness to expend effort         | 3.82 | 0.78| 0.56 | 0.33 | 0.36 | 0.05 |      |      |      |      |      |      |      |
| 6. Age                                  | 47.89| 9.05| 0.01 | 0.04 | 0   | -0.16| 0.34 |      |      |      |      |      |      |
| 7. Gender*                              | 0.04 | 0.18| -0.07| -0.06| 0.18 | -0.06|      |      |      |      |      |      |      |
| 8. Marital status*                      | 4.25 | 1.42| 0.05 | -0.04| -0.08| -10  | 0.29 | 0.47 | 0.19 |      |      |      |      |
| 9. Dependents                           | 1.39 | 0.49| -0.14| 0.02 | 0   | -0.06| -0.12| -0.36| 0.03 | -0.35|      |      |      |
| 10. Education                           | 2.75 | 0.78| -0.08| -0.04| 0.21 | 0.26 | -0.02| -0.03| -0.04| -0.05| 0.14 |      |      |
| 11. Organizational tenure               | 20.89| 10.09| 0    | 0.10 | 0.11| -0.11| 0.32 | 0.82 | 0.06 | 0.37 | -0.29| -0.16|      |
| 12. Job tenure                          | 15.69| 11.22| 0.03 | 0.09 | 0.09| -0.25| 0.25 | 0.51 | 0.13 | 0.32 | -0.26| -0.23| 0.66 |

Note. Coefficients ≥ |0.16|, |0.20| and |0.27| are significant at 0.05, 0.01, and 0.001, respectively.
* binary variable
Hypotheses 6 and 7 postulated a mediating role for employability in the relationship of career orientation with openness to change and willingness to expend effort. The testing of H4 had already shown that the employability–openness path was not significant, which automatically rendered H6a and H7a non-tenable [Baron and Kenny, 1986; Judd and Kenny, 1981]. On the other hand, the testing of H5 indicated a significant path from employability towards willingness to expend effort, which justified further testing for mediation [Judd and Kenny, 1981]. Hence, direct and indirect effects of protean orientation and the boundaryless mindset on willingness to expend effort were calculated using the relevant procedures in MPlus. This analysis showed that the indirect effect of protean career orientation on willingness to expend effort, via employability, was significant ($\beta_{\text{indirect}} = 0.19$, $z = 4.68$, $p < 0.001$) while the direct effect was non-existent ($\beta_{\text{direct}} = 0$, $z = 0$, $ns$). The indirect effect of the boundaryless mindset on willingness to expend effort, via employability, was significant ($\beta_{\text{indirect}} = 0.10$, $z = 2.82$, $p < 0.01$) and the direct one was significant, too ($\beta_{\text{direct}} = 0.22$, $z = 3.65$, $p < 0.001$). In both cases the total effect was significant ($\beta_{\text{total}} = 0.19$, $z = 2.84$, $p < 0.01$ and $0.32$, $z = 4.85$, $p < 0.001$, respectively). Overall, testing lent support to both H6b and H7b, the difference being that full mediation was shown in the former while partial mediation was shown in the latter.

To increase certainty over the result, confidence intervals were also estimated using bootstrapping, which corrects for the bias inherent in the non-normality of the distribution of the interaction terms [MacKinnon, 2008; MacKinnon, Lockwood and Williams, 2004], also using the relevant procedures in MPlus [Muthén and Muthén, 1998–2012]. The results of bootstrapping testing were in line with those of the conventional testing. In particular, the 1% confidence interval [CI] for the indirect effect of protean career orientation on willingness to expend effort did not contain zero (0.067 to 0.319) while the 5% CI for the respective direct effect contained zero (–0.132 to 0.132). The 1% CI for the total effect did not contain zero either (0.008 to 0.378), results that are in line with full mediation. Regarding the boundaryless mindset, the findings were also analogous to those obtained with the traditional method (5% CI – 0.013 to 0.182 for the indirect effect; 1% CI – 0.058 to 0.385 for the direct effect; and 1% CI – 0.129 to 0.509 for the total effect).

Finally, a number of alternative models that represented logically feasible causal orderings that were different from the one assumed in our model were tested. These included a model that treated employability as an exogenous variable and the career orientation variables as mediators ($\chi^2 [24] = 64.07$, $p < 0.001$, RMSEA = 0.103, CFI = 0.829, TLI = 0.715, SRMR = 0.076), and a model that treated employability as the final effect variable with openness towards change and willingness to expend effort as mediators ($\chi^2 [13] = 24.89$, $p < 0.05$, RMSEA = 0.076, CFI = 0.932,
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TLI = 0.858, SRMR = 0.035). Both of these models showed substantially inferior, and in fact non–satisfactory, data fitting than our chosen model. We must note that in the above exercise we restrained ourselves from testing models that considered the career orientation variables as final effect variables because, and regardless of any data fitting properties, such models were contrary to theory and logical reasoning and therefore should not be considered under any circumstances [Bozionelos, 2003].

Discussion

The aim of the research was to develop and test a model that revolved around employability in order to account for important employee outcomes at times of severe organizational changes caused by serious economic crisis. Another purpose of the study was to investigate the role of individual career orientation in the shaping of perceptions of employability. Organizational change imposes a heavy toll on employees, both in terms of increased job demands and of uncertainty and psychological strain. Attitudes such as positivity towards change and employee willingness to expend effort during the time of change become critical for the success of change, the sustenance of organizational performance, and the relatively smooth transition to normality. Therefore, identification of factors that are likely to enhance such positive attitudes is an important endeavor in order to develop a better understanding of how the negative effects of change can be minimized.

The findings were supportive of the hypothesized relationship of both protean career orientation and the boundaryless mindset with self–perceived employability. It appears that taking one’s own personal values into account along with being active in leading one’s choices enhances self–confidence that one can maintain one’s employment or find alternative employment under conditions of uncertainty. Similarly, being psychologically prepared to cross functional, role, and even organizational borders is also associated with perceptions of ability to be employed. Psychological readiness to move has an apparent conceptual overlap with readiness to face change, and this should be the reason that the boundaryless mindset demonstrated a direct relationship with openness towards change.

To the extent, therefore, to which psychological readiness to move along the value drive and taking a personal drive in one’s career can be cultivated, it represents a way to enhance perceptions of employability. The findings further suggest that nourishing these career orientations increases the likelihood for employees to express positivity towards change and motivation to work for the organization at times of change and uncertainty. The study suggests that the mechanisms are both direct and indirect, via employability. Employability mediated the relationship of
both boundaryless and protean career orientation with employee willingness to
expend effort. In fact, the totality of the relationship of protean career orienta-
tion with motivation to expend effort at work was explained by employability. This
shows that employability has an important role in the way protean values and the
boundaryless mentality are translated into motivation to work. This finding also
implies that employability perceptions are instrumental in the development of em-
ployee motivation to expend effort at times of change, regardless of how these
perceptions of employability are formed.

On the other hand, we must recognize that employability did not hold the role
we expected in accounting for individual variation in openness to change. A reason
for this may be that openness to organizational change is apparently more a function
of reactiveness rather than of proactivity and taking initiative. Normally organiza-
tional change is initialized from few organizational agents at the top, where indi-
viduals react positively or negatively to it, depending on their attitudes to change.
Employability connotes an active rather than passive approach to situations and for
this reason it may not have a significant role in whether individuals are accepting
and welcoming of change. In support of this view is the finding that the boundary-
less mindset demonstrated a direct relationship with openness to change, while the
protean orientation did not show such a relationship. Protean orientation, which
contains self–direction and active drive by values, denotes initiative and proactivity,
which are not required or come at odds with the passive stance that openness to
change implies. On the other hand, the preparedness for movement (rather than
actual movement) that the boundaryless mindset symbolizes shares meaning with
the reactiveness and passivity inherent in openness towards change.

Finally, it is important to note that it emerged that career orientation is important
by itself for employee attitudes and intentions at times of change and not simply as
an antecedent of employability. The findings, therefore, imply that a workforce with
strong protean career orientation and a boundaryless mindset can be an advantage
at times of severe change. The fact that the boundaryless mindset had a richer re-
lationship with outcomes may pertain to the fact that change is normally imposed,
therefore, reactiveness and preparedness for it, rather than the proactiveness contained
in proteity, may be more important for employees to successfully deal with.

Finally, the failure to identify the hypothesized moderating role for perceived
organizational support needs to be discussed. The overall circumstances may be
responsible for this. It was not only severe change within the particular organization
that was occurring, but this change was embedded within a country under severe
financial crisis. In effect, it was the whole of Greece—all of the public and the
private sector along with the society itself—that was under extreme pressure and
financial uncertainty, with cuts and other measures seen in every aspect of everyday life. The change within this particular organization was a decision made by the government (which controls all state-owned enterprises) rather than the heads of particular organizations, where the same changes were observed across all of the public sector and state-owned utilities. Many of these changes had been viewed with hostility and as unnecessary by many Greeks at the time, typically blaming the government. Employees, therefore, may not have been able to distinguish the specific organization they were working in from the rest of the state-owned sector and, hence, the effects of the support they received within the particular organization were overshadowed by the general negative feeling towards the government.

**Limitations and Directions**

The model was developed with the use of logical reasoning and earlier research findings, and demonstrated satisfactory data-fitting properties. However, it remains a fact that data were collected at a single point in time, which poses questions on causal order, regardless of how sound and sophisticated the data analytic techniques are [Bozionelos, 2003]. Furthermore, the use of self-reports makes common method bias a possibility. However, the precautions taken in the collection of data (e.g., the purposes of the study were not made explicit and measures were presented in random order in the questionnaire) and the satisfactory reliabilities of the measures somewhat alleviate concerns [Chandon, Morwitz, and Reinartz, 2005; Podsakoff, MacKenzie, Lee, and Podsakoff, 2003]. Nevertheless, and notwithstanding this limitation, individual perceptions of their own employability may be more useful in understanding attitudes and behaviors than ratings by others, and therefore self-reports may be the most appropriate measurement method in the present context [e.g., see Wittekind, Raeder and Grote, 2010]. Furthermore, the danger to validity by self-reports is probably overstated [Spector, 2006; also Bozionelos, Bozionelos, Polychroniou, and Kostopoulos, 2014].

Finally, what the model predicts is, in essence, an intention to expend effort rather than actual behavior (i.e. real effort). This is a limitation that must be acknowledged, but it should also be borne in mind that intentions are precursors [Ajzen and Fishbein, 2005] and good predictors of actual behavior [Krauss, 1995].

Future research should consider other outcomes that are important in organizational change, such as organizational citizenship behaviors oriented towards the organization and towards co-workers along with employee intentions to leave and actual turnover. In addition, under circumstances of extensive and unpleasant change, relationships and support from individuals may be more important than
support from the organization as an entity. Such factors may serve as moderators in the relationship of employability with outcomes. Finally, career orientation variables had a potent role in our model. This means that future work should try to identify determinants of career orientation and ways to develop it.

References


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**Zatrudnialność w czasach głębokiego kryzysu ekonomicznego. Rola orientacji zawodowej**

**Streszczenie**

Na potrzeby badania stworzono model antecedencji i konsekwencji zatrudnialności pracowników w organizacji podejmującej działania ukierunkowane na wprowadzenie znaczących zmian, w odpowiedzi na poważny kryzys finansowy.

Badanie zostało wykonane w państwowym zakładzie komunalnym w Grecji. Wzięło w nim udział 157 osób. Głównym celem badania było sprawdzenie, czy sposób myślenia w kategorii kariery „bez barier” i proteańska orientacja kariery mogą pozytywnie wpływać na zatrudnialność, co wiąże się ze zwiększeniem otwartości na zmiany organizacyjne oraz wzmacnieniem woli włożenia pewnego wysiłku w pracę. Wyniki potwierdziły hipotetyczny związek między proteańską orientacją kariery a nieograniczonym sposobem myślenia a zatrudnialnością. Ponadto, zgodnie z oczekiwaniami, zatrudnialność była ścisłe powiązane z gotowością podjęcia wysiłków, a także stanowiła czynnik pośredni w związku z nieograniczonym sposobem myślenia i zmienną orientacją kariery. Z drugiej strony, zatrudnialność nie była powiązana z otwartością na zmianę i hipoteza o „moderującej” roli postrzeganej wsparcia organizacyjnego nie została potwierdzona. Wyniki badania są rozpatrywane w kontekście ram teoretycznych dotyczących kontekstu kariery i zatrudnialności, a także wpływu wyżej wymienionych czynników na zarządzanie zasobami ludzkimi w okresach, w których zachodzą poważne zmiany.
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