

“Alexandru Ioan Cuza” University of Iași
Faculty of Psychology and Education Sciences
Doctoral School of the Faculty of Psychology and Education
Sciences

Fostering job-search behaviours from the dual-
process theories perspective

- Abstract -

Scientific Advisor,
Professor Ticu Constantin

PhD Candidate,
Andrei Rusu

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Introduction

A phenomenon with deep economic repercussions, unemployment poses a threat including to the mental health of the individuals (Paul and Moser, 2009), while the psychological costs on the victims and their families are generally ignored by the public measures taken to reduce the phenomenon. The issue of unemployment has been increasingly tackled over the last decades, especially in terms of exploring and attempting to create appropriate interventions to address its manifestation and consequences. An illustrative example in this respect is offered by the program JOBS II (Curran, Wishart, and Gingrich, 1999), which is perhaps the only evidence-based psychological intervention designed for unemployed persons.

To this date, most of the psychological interventions, irrespective of the aim they were designed to, have primarily addressed the explicit level of information processing (see the dual-process theories – Chapter 2 of this thesis). Although the effectiveness of this generalised tendency is evidence based, we believe that the effect of such interventions can be increased by direct addressing and the implicit level. Moreover, recent evidence suggests that the distortions at implicit level often remain unaffected following conventional

interventions (Clerkin and Teachman, 2010). Therefore, we consider that implicit and even mixed interventions can be designed to address complex psychological issues.

A category of implicit procedures that have not received very much attention as intervention techniques is that of evaluative conditioning. The evaluative conditioning effect involves modifying the valence of a stimulus through its repeated association with another (positive or negative) stimulus. The authenticity and generality of the effect is categorical (Hofmann et al., 2010) and it is reflected at both the explicit (self-report) and implicit (associative) level.

Starting from this assumption, the major aim of our doctoral thesis was to develop and empirically test an intervention program designed to improve the young people's ability to find a job, based on the dual-process theories. More precisely, we aimed to integrate an explicit intervention program (training designed to improve job search self-efficacy) by means of implicit intervention (evaluative conditioning procedure to positively increase the implicit attitudes towards the job searching process).

Reaching this objective involved a series of preliminary steps:

First of all, there was the attempt to clarify the effectiveness of the (explicit) intervention programs designed

for the persons looking for a job. To this purpose, we resorted to a meta-analytical approach which is the object of the first study included in our thesis.

Secondly, testing the effectiveness of an intervention designed to amplify job search self-efficacy requires measuring the effects obtained by means of an instrument that is solid enough from a psychometric viewpoint. The second study involved adapting the scale suggested by Saks and Ashfort (1999) to the assessment of the job search self-efficacy.

The third study (although with no direct role in reaching the major goal of the research) tested, based on a longitudinal design, a number of well-established assumptions in the literature on the relationship between unemployment, self-efficacy and two mental health indicators (anxiety and depression).

Starting from observations derived from scientific literature and the results obtained in the above-mentioned studies, the final stage consisted in the implementation of a randomized controlled trial aimed to test, on the one hand, the effectiveness of a training program designed to amplify job search self-efficacy among young people and, on the other, whether the introduction of an implicit intervention procedure as additional active ingredient provides effective incremental

support. The development of this initiative constituted the fourth study of our thesis.

1. Unemployment. Effects and mitigation

Of all the occupational categories, the young people constitute one of the most vulnerable segments, being also the group that is most affected during recessions (Roberts, Duggan, and Noble, 1982; Winefield, Tiggermann, and Goldney, 1991). The Report published in March 2013 on employment and social situation in the EU shows that 8 million young people aged between 15 and 25 are neither in employment nor in education and training (The European Commission, 2013, IP/13/282). Data about our country situate Romania at the fore of the Member States as regards the issue of youth unemployment.

Beyond socio-economic factors, an extended series of psychological factors fall among the causes and consequences of unemployment. Most of the times, the relationship between psychological aspects and finding a job is mediated by job seeking specific behaviours. One of the psychological factors is job-search self-efficacy, which refers to the person's

confidence in his / her own ability to carry out tasks and activities characteristic to the job-searching process (Kanfer and Hulin, 1985). Most researchers believe it has a positive effect on the job-search behaviours, which in turn influence the success of the employment process (Eden and Aviram, 1993; Ellis and Taylor, 1983; Saks and Ashforth, 2000; Schwab, Rynes, and Aldag, 1987; Strumpf, Austin, and Hartman, 1984).

2. What is implicit in social cognition? Theories and measures

The contributions in the field of implicit social cognition can be grouped into two main categories: (a) on a theoretical level, it generated the development of the dual-process generalised models; (b) on a methodological level, it facilitated the emergence of indirect measurement techniques.

The dual-process theories evolved from particularised models for certain phenomena (such as persuasion) towards general models. The generalised models of the dual processes are also called dual-system theories, since they refer to two systems based on distinct functioning principles (Deutsch and

Strack, 2006). The most widely known general models are (a) The Reflective-Impulsive Model (Strack and Deutsch, 2004), and (b) The Associative–Propositional Evaluation Model (APE; Gawronski and Bodenhausen, 2011).

The Reflective-Impulsive model explains the social behaviours through the interactive effect of impulsive and reflective processing. The behaviours determined by the reflective system are the consequence of an ample reasoning process; in the case of the impulsive system, the stimuli activate behavioural schemes by spreading activation at the level of the associated elements. Compared to the reflective-impulsive model, within the APE model, the associative processes are in their turn influenced by the propositional processes.

One of the methodological methods that facilitated also the research on the mental processes determining social behaviours consists in the implicit measures. De Houwer and colleagues (2009) define the implicit measures as results of measurement procedures, causally and automatically produced by psychological attributes. Previous studies converge to the conclusion that there is, undoubtedly, evidence on the predictive validity of the implicit measures, but this is very closely related to the type of behaviour under consideration,

the specific conditions in which it is analysed, and the personal characteristics that should also be specified.

3. Evaluative conditioning

Evaluative conditioning refers to changing the valence of a stimulus (called conditioned stimulus – CS) following its repeated association with another stimulus of positive or negative valence (called unconditioned stimulus – UC), so that the CS takes over the valence of the UC (Martin and Levy, 1978; De Houwer, 2007). The repeated association of the stimuli represents the procedure allowing valence change, which represents in its turn the evaluative conditioning effect (De Houwer, 2007; De Houwer et al., 2001).

Several such procedures have been tested throughout time, such as the ones derived from the picture-picture paradigm (De Houwer, Baeyens, Vansteenwegen, and Eelen, 2000), or the self-referencing task (Prestwich, Perugini, Hurling, and Richetin, 2010). The latter stood out in the studies carried out over the last years, through the use of a special UC category, namely the “Self”. Since people generally have a positive attitude (self-esteem) towards

themselves both at implicit and at explicit level (Yamaguchi et al., 2007), self-related stimuli proved to be very useful in creating positive attitudes (Gawronski, Bodenhausen, and Becker, 2007; Perkins, Forehand, and Greenwald, 2012; Perugini et al., 2012).

Although the research in the recent years has provided important information on EC and its underlying processes, new research is still required in order to provide more clarity (De Houwer, 2007, 2011; Gast et al., 2012).

1st Study - Effectiveness of the interventions designed to amplify the ability to find a job: meta-analytical review

The first study carried out within our doctoral thesis consists in a systematic assessment of the effectiveness of the intervention programs designed to amplify the ability to find a job tested to this date. Of 38 articles on this subject, 9 presented experimental or quasi-experimental studies with pre-test equivalence of the variables analysed, and reported the data necessary for computing meta-analytical indicators. The interventions tested have had a strong effect, in the expected

direction, on self-efficacy measured after the intervention ($d = 1.08$), but a low effect during the follow-up period ($d = 0.42$). The change was also reflected on the job-search behaviours, that is, by amplifying them, ($d = 0.76$), but presenting significant differences between the studies included. The frequency of the participants from the experimental groups who found a job was significantly higher compared to the number of corresponding participants in the control groups ($OR = 1.98$).

The highlighted results draw attention to the reduction of the long term effect and the diminished pragmatic impact (low intensity effect on finding a job) of the interventions tested. Interpreting this information requires however a high level of precaution, considering the reduced number of studies analysed and the high level of variability among them. Nevertheless, the data obtained to this moment provides an optimistic view on the ability of the psychological interventions to reduce unemployment and its negative effects.

2nd Study - Cultural adaptation of the job search self- efficacy scale

The importance of job-search self-efficacy and the need to study it require the use of measurement instruments able to satisfy the psychometric rigours (Lent and Brown, 2006). The second study aimed to adapt, from a cultural viewpoint, one of the instruments designed to measure job search self-efficacy. Therefore, the scale suggested by Saks and Ashfort (1999) was chosen; the scale consists of ten items and it offers the advantage of research efficacy.

Based on a final sample of 300 undergraduate and MA students and 117 unemployed persons, the single-factorial structure of the job search self-efficacy scale (JSSE) was replicated both on the basis of the exploratory factor analysis and on the confirmatory factor analysis. Moreover, testing the invariance for the two categories of persons (students vs. unemployed) highlighted the metric equivalence of the JSSE scale. Testing the construct validity was completed by obtaining the convergent relations both by means of instruments designed for a similar purpose (professional self-efficacy; Solberg, Good, and Nord, 1994), and other interrelated constructs, such as general self-efficacy or self-esteem. From the criteria point of view, the results obtained

are favourable to the validity of the JSSE scale, since its relation to the job-search specific behaviours is statistically significant. The image of the psychometric characteristics is completed by the reliability of the instrument used, since it is based on superior values of the internal consistency indicator, but also on the test-retest average value.

Taking all this information into consideration, we can conclude that the instrument measures accurately the job search self-efficacy, and it can thus be used in the research approaches to this construct.

3rd Study - Dynamics of job search self-efficacy and mental health in case of a sample of unemployed persons: longitudinal study

The effects of unemployment on the perceived self-efficacy and mental health, as well as the relationships between these variables have been studied by means of a longitudinal design based on two measurements. The sample of subjects consisted in 30 persons made redundant within the same company, assessed immediately after losing their job and three months after this moment (during this period, only 12 participants found a new workplace).

Although job search self-efficacy (JSSE) is one of the factors associated to finding a new job (Kanfer, Wanberg, and Kantrowitz, 2001), no significant differences were noticed between the initial values of JSSE between the persons who found a new job and those that were still unemployed. Instead, reemployment had a significant positive effect on JSSE, reflecting thus the postulates of Bandura's theory (1997). As far as the relation with the mental health indicators is concerned, the data obtained confirm the already consecrated evidence (McKee-Ryan, Song, Wanberg, and Kinicki, 2005; Murphy and Athanasou, 1999), explained in more detail in the meta-analysis carried out by Paul and Moser (2009). Thus, re-employment has a significant positive effect on one of the dimensions of (behavioural) anxiety and on depression. However, the persons who could not find another job did not manifest the expected negative effect.

Bandura (1997) theorises a negative relation between self-efficacy and emotional disorders, a relation that has been discussed in several studies (Cutrona and Troutman, 1986; Maciejewski et al., 2000), including in the case of young people (Muris, 2002). This was also confirmed in the present research, except for the association between JSSE and depression immediately upon dismissal. Moreover, the structure of the cross-lagged correlations between the results

obtained in the two measurements suggests a possible causal effect of JSSE on (behavioural) anxiety and the symptoms of depression. These results are doubled by highlighting an indirect effect of the occupations status (unemployed vs. re-employed) on mental health indicators, by means of job search self-efficacy. Thus, corroborating the data obtained, this study offers the first evidence of a possible mediator in the relationship between unemployment and mental health.

4th Study - Improvement of the job search process among young people from a dual-process theory perspective. Assessing the efficacy of an intervention program

The present study was designed to develop an intervention intended to amplify the young people's ability to find a job, starting from the dual-process theories (Gawronski & Bodenhausen, 2011; Strack & Deutsch, 2004) in the field of implicit social cognition. The intervention program was designed for targeting both information processing systems (both at explicit and implicit level). In order to achieve this goal, we implemented an efficacy study with a factorial design (formed by the combination of two different interventions: an

explicit intervention – a training program designed for streamlining job search activities – and an implicit intervention – an evaluative conditioning paradigm). The study compared (1) an intervention group that received the program in a manner that combines both the explicit and implicit intervention (mixed intervention), (2) a group that received only explicit intervention and the conditioning task was placebo (explicit and placebo), and (3) the third group was the control group of the type “waiting list” (to benefit from intervention at the end of follow-up period). The participants sample was formed of 76 MA students (most of them in the field of psychology) currently looking for a job.

Preliminary analyses have shown the additional role of implicit attitudes, together with job search self-efficacy (JSSE), in predicting the job search behaviour. Thus, the implicit attitudes can be considered not only an indicator of the occurrence of the conditioning effect, but also a proximal indicator of intervention efficacy (together with self-efficacy).

The results obtained have highlighted an effect of the intervention both at explicit level (enhancing job search self-efficacy levels in both groups receiving training – $d = .59, .68$) and at implicit level (the evaluative conditioning procedure modifying the implicit attitudes towards the job search process – $d = .58$). The results on self-efficacy were preserved a month

after the study, but the differences at the level of implicit attitudes became insignificant. At behavioural level, the first changes were recorded a month after the completion of the study, the participants in the group receiving mixed intervention reporting the highest frequency of the job search behaviours ($d = .85$). Moreover, both the JSSE and the implicit attitudes proved to be mediators of behavioural change intervention. In addition, the efficacy of the intervention on the modification of self-efficacy seems to be influenced by the level of the work alliance established between the trainer and the trainees.

Besides their intrinsic value, the results obtained open new avenues for research, encouraging the application of the discoveries in the field of implicit social cognition in the most diverse areas of study.

References

- Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: Freeman.
- Clerkin, E. M., & Teachman, B. A. (2010). Training implicit social anxiety associations: An experimental intervention. *Journal of Anxiety Disorders*, 24, 300-308.

- Comisia Europeană (2013). *Raportul CE privind încadrarea în muncă a tinerilor*. Retrieved from http://europa.eu/rapid/press-release_IP-12-1311_ro.htm
- Curran, J., Wishart, P., & Gingrich, J. (1999). JOBS: A manual for teaching people successful job search strategies. *Ann Arbor: University of Michigan, Institute for Social Research, Michigan Prevention Research Center*.
- Cutrona, C. E., & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child development*, 1507-1518.
- De Houwer, J. (2007). A conceptual and theoretical analysis of EC. *The Spanish Journal of Psychology*, 10(2), 230-241.
- De Houwer, J. (2011). *Evaluative conditioning: A review of procedure knowledge and mental process theories*. TR Schachtman & S. Reilly (Eds.), *Applications of learning and conditioning*. Oxford, UK: Oxford University Press.
- De Houwer, J., Baeyens, F., Vansteenwegen, D., & Eelen, P. (2000). Evaluative conditioning in the picture–picture paradigm with random assignment of conditioned stimuli to unconditioned stimuli. *Journal of Experimental Psychology: Animal Behavior Processes*, 26(2), 237.
- De Houwer, J., Teige-Mocigemba, S., Spruyt, A., & Moors, A. (2009). Implicit measures: A normative analysis and review. *Psychological Bulletin*, 135, 347-368.

- De Houwer, J., Thomas, S., & Baeyens, F. (2001). Associative learning of likes and dislikes: A review of 25 years of research on human evaluative conditioning. *Psychological Bulletin*, *127*(6), 853-869.
- Deutsch, R., & Strack, F. (2006). Duality models in social psychology: From dual processes to interacting systems. *Psychological Inquiry*, *17*, 166-172.
- Eden, D., & Aviram, A. (1993). Self-efficacy training to speed reemployment: Helping people to help themselves. *Journal of Applied Psychology*, *78*, 353-360.
- Ellis, R.A., & Taylor, M.S. (1983). Role of self-esteem within the job search process. *Journal of Applied Psychology*, *78*, 352-360.
- Gast, A., Gawronski, B., & De Houwer, J. (2012). Evaluative conditioning: Recent developments and future directions. *Learning and Motivation*, *43*(3), 79-88.
- Gawronski, B., Bodenhausen, G. V., & Becker, A. P. (2007). I like it, because I like myself: Associative self-anchoring and post-decisional change of implicit evaluations. *Journal of Experimental Social Psychology*, *43*(2), 221-232.
- Gawronski, B., & Bodenhausen, G. V. (2011). The associative-propositional evaluation model: Theory, evidence, and open questions. *Advances in Experimental Social Psychology*, *44*, 59-127.

- Hofmann, W., De Houwer, J., Perugini, M., Baeyens, F., & Crombez, G. (2010). Evaluative conditioning in humans: A meta-analysis. *Psychological Bulletin*, *136*, 390–421.
- Kanfer, R., & Hulin, J. L. (1985). Individual differences in successful job searches following lay-off. *Personnel Psychology*, *38*, 835–847.
- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied Psychology*, *86*, 837–855.
- Lent, R.W., & Brown, S.D. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment*, *14*, 12-35.
- Maciejewski, P. K., Prigerson, H. G., & Mazure, C. M. (2000). Self-efficacy as a mediator between stressful life events and depressive symptoms: Differences based on history of prior depression. *The British Journal of Psychiatry*, *176*(4), 373-378.
- Martin, I. & Levey, A. B. (1978). Evaluative conditioning. *Advances in Behaviour Research and Therapy*, *1*, 57-102.
- Muris, P. (2002). Relationships between self-efficacy and symptoms of anxiety disorders and depression in a normal adolescent sample. *Personality and Individual Differences*, *32*(2), 337-348.

- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264-282.
- Perkins, A. W., & Forehand, M. R. (2012). Implicit Self-Referencing: The Effect of Nonvolitional Self-Association on Brand and Product Attitude. *Journal of Consumer Research*, 39(1), 142-156.
- Perugini, M., Richetin, J., & Zogmaister, C. (2012). The Formation of Implicit and Explicit Attitudes for Neutral and Valenced Stimuli Using the Self. *Learning and Motivation*, 43(3), 135-143.
- Prestwich, A., Perugini, M., Hurling, B., & Richetin, J. (2010). Using the self to change implicit attitudes. *European Journal of Social Psychology*, 40, 61–71.
- Roberts, K., Duggan, J., & Noble, M. (1982). Out-of-school youth in high unemployment areas. *British Journal of Guidance and Counselling*, 10,1-11.
- Saks, A.M., & Ashforth, B.E. (1999). Effects of individual differences and job search behaviors on the employment status of recent university graduates. *Journal of Vocational Behavior*, 54, 335–349.
- Schwab, D.P., Rynes, S.L., & Aldag, R.A. (1987). Theories and research on job search and choice. In K. Rowland and G. Ferris (Eds.), *Research in Personnel and Human Resource Management* (Vol. 5, pp. 129–166). Greenwich, CT: JAI Press.

- Solberg, V. S., Good, G. E. & Nord, D. (1994). Career search self-efficacy: Ripe for applications and intervention programming. *Journal of Career Development, 21*, 1, 63-71.
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review, 8*, 220-247.
- Strumpf, S.A., Austin, E.J., & Hartman, K. (1984). The impact of career exploration and interview readiness on interview performance and outcomes. *Journal of Vocational Behavior, 24*, 221–235.
- Winefield, A., Winefield, H., Tiggemann, M., & Goldney, R. (1991). A longitudinal study of the psychological effects of unemployment and unsatisfactory employment in young adults. *Journal of Applied Psychology, 76*, 424.
- Yamaguchi, S., Greenwald, A. G., Banaji, M. R., Murakami, F., Chen, D., Shiomura, K., et al. (2007). Apparent universality of positive implicit self-esteem. *Psychological Science, 18*, 498-500.