Self-Efficacy in Career Planning: A New Approach to Career Exploration

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Abstract. Through two consecutive studies we attempted to explore the beliefs of personal efficacy in respect to one's career and in relation to the continuously evolving patterns in career planning as these issues seem to have consequences to theory and research of career counselling as well as to the use of psychometric tools. We aimed at developing a research framework for assessing career self-efficacy for use in counselling services. In Study 1, a model describing six theoretically driven beliefs was psychometrically tested, arriving at a 21-item Perceived Self-Efficacy in Career Scale (PSECS); in this study, mainly item analysis and exploratory factor analysis methods were applied to Greek adults' data (N=126). In Study 2 we subjected the PSECS to confirmatory analysis testing on Greek high-school students' data (N=276). All analyses supported four dimensions, namely Career Management, Career Skills, Flexibility at Work, and Creativity at Work. The PSECS may offer an additional perspective for counselling about the way individuals evaluate their skills in order to effectively manage related career issues. Moreover, the scale may theoretically contribute and aid research in career counselling with respect to how people plan and adjust their careers within a changing economic landscape.

Keywords: Perceived career self-efficacy; Career skills; Item-analysis methods; Convergent validity; Confirmatory Factor Analysis

Introduction

Significant changes have been taking place in several areas of human activity and in the nature of career over the last few decades. Societal and environmental changes, such as financial crises, technological advancements and labour market changes have increased workforce diversity and have altered traditional work contexts, creating changes in how individuals manage and construct their career. In this paper, we consider *career* as a range of working aspects and other relevant

experience shaping a unique path through individual's life including jobs, occupations, professions, employers, and industries, as well as individuals' perceptions of career events, career alternatives, and outcomes or individuals' adaptation to multiple roles and transitions (Herr & Cramer & Niles, 2004; Sidiropoulou-Dimakakou, 2006). An individual's career is influenced by numerous contextual factors such as national culture, economy, the political environment, as well as by personal variables which play an important role, such as relationships with others (Greenhaus, Callanan, & DiRenzo, 2008). In Greece additional contextual factors may influence career (e.g., military service, educational system).

Changing labour markets, obligations to others, shifts in job (Mylonas & Furnham, 2014) along with life roles, all make career and work quite challenging tasks. Nowadays, the urgent need to find occupational meaning and connection may be getting stronger across the life span (Bloch, 2005; Plimmer, 2012). At the same time, management scholars claim that the concept of career has largely lost its traditional features related to the notions of linearity and predictability and we are heading towards new forms of careers that are often attributed to the term "boundaryless" (Arthur, Khapova & Wilderom, 2005), "protean" (Hall, 1996), "customized" (Benko & Weisberg, 2007), "kaleidoscope" (Sullivan & Mainiero, 2008), "dual" (Gari & Mylonas, 2006), and "portfolio" (Handy, 1998). The new career conceptualization is challenging in its nature (i.e., employment and economic insecurity, psychosocial difficulties, multiple transitions within a job/across vocations, new forms of work, and lifelong vocational education and training) and requires complicated judgments about the self and the world.

All these issues seem to have consequences to theory and research of career counselling as well as to the use of psychometric tools. Therefore a question arises: *How can career counsellors manage social developments, and how can they respond to the demands of their clients and support them to reflect on their future and find convenient solutions to their problems?* Career counselling practitioners may need to develop new scientific approaches and modify the existing theoretical concepts to meet current needs (Sidiropoulou-Dimakakou, Argyropoulou, & Drosos, 2013), thus they need to a) support the emergence of new concepts, which are viewed as being more appropriate to satisfy new demands and challenges, and b) support the development of new tools that will meet the needs and expectations of their clients.

Perceived self-efficacy in career planning
The reviewed literature demonstrates that Bandura's (1982) self-efficacy concept has inspired vocational research and practice (Betz & Hackett, 2006). In particular, the concept of self-efficacy in career planning refers to the individual's belief in terms of his/her ability to implement the appropriate actions required to effectively manage occupational roles and career issues. Therefore, the construct of self efficacy reflects a dynamic process rather than a simple match of personal and job characteristics (Lawler, 1994). Employees of high perceived efficacy are likely to perform occupational roles innovatively, whereas those of low perceived efficacy are prone to process occupational

duties conventionally with little personal embellishment (Gregersen, Vincent-Höpe & Nienhaus, 2014).

For the reasons mentioned up to this point, people experience a high rate of change either within or across vocations over the full course of their working lives. To come through, people must be in charge of their own self-development. Thus, occupational transition can be moderated by the perceived sense of efficacy (Audia, 1995; Bandura, 1997), and this also relates to skill development and competency levels with respect to new occupational roles.

Nauta et al. (2010) stressed the importance of exercising control over various complicated career situations, such as the explanation of employability orientation, turnover intention, and employee motivation. Jobs vary in their degree of clarity about the roles employees are expected to play and how their role performance is evaluated. Thus, employees of high sense of efficacy exhibit marked gains in performance, whereas those of low perceived efficacy improve only slightly (Bandura, 1997; Stajkovic & Luthans, 1998).

Experimental analyses reveal that perceived efficacy is a major mechanism through which goals affect motivation and performance, as individuals with high self-efficacy beliefs tend to be highly devoted towards the achievement of their career goals (Latham, Locke & Edwin, 2002; Locke & Latham, 1990). Substandard performance diminishes effort in those who doubt their capabilities but lead self-assured individuals to strengthen their efforts towards success. Consequently, they expect positive outcomes from their efforts to perform better in their work and enable themselves to work flexibly on multiple research projects at the same time (Vrugt & Koenis, 2002). According to Parker, Williams, & Turner (2006) individuals who are flexible in role orientation tend to face difficulties as challenges and adopt proactive problem solving behavior and pursue improvement within various complicated-hard tasks and situations. Additionally, they exhibit a higher sense of personal responsibility in achieving their career goals, gaining this way a sense of accomplishment.

Taking into account a) the theoretical background of self-efficacy in mastery and in enactment of occupational roles, b) the rapid social and economic changes, which create new challenges in careers and c) a short number of pilot interviews with career counsellors, the present article describes a new career guidance research approach through the "Perceived Self Efficacy in Career Scale". Through this scale, we have attempted to develop a framework for assessing self-efficacy in career planning for further use in counselling services. Our scale examines the beliefs one forms with respect to his/her ability to effectively manage various career issues that is the self-appraisal of the skills that a person activates so as to fulfill a variety of requirements and functions related to career.

Study 1
This first study aimed at the development and initial testing of the Perceived Self Efficacy in Career Scale (PSECS).

1. Method
PSECS was developed on the basis of the following six theoretical dimensions: (a) *Psychological Resilience:* refers to one's ability to cope with change even when circumstances are discouraging or disruptive (Bimrose, & Hearne, 2012), (b) *Work performance*: reflects a person's confidence and performance capability at work along with the sense of accomplishment he/she can gain from it (Waldman, 1994), (c) *Social awareness*: the level to which one actively responds to society demands (Goleman, 2001), (d) *Personal skills of flexibility*: as reflected in the skills developed by being actively interested in a career; this is not restricted only to employment but also includes learning (Sidiropoulou, Argyropoulou & Drosos, 2010), (e) *Social support network*: reflects how efficient one is in receiving career support by his/her social network (Thoits, 1982), (f) *Action plan*: highlights people's beliefs in their efficacy to determine the goals they adopt and the strength of their commitment to them (Nathan & Hill, 2006), (g) *Ability of adaptation to transition*: the individual's readiness to respond to changes in work roles and to career transitions (Savickas, 1997).

The authors generated 39 novel items reflecting the aforementioned theoretical perspectives and operational definitions from the literature and through a small number of exploratory interviews with the intent to expand content coverage and create more specific scales. Psychometric methods described in detail in the results section were employed in our attempt to arrive into a shorter and consistent set of items.

Participants
The first study was conducted during March and April 2012. The participants were 126 employed (63%) and unemployed (34%) adults, including 23 Second Chance Schools students (schools for adults who have not finished basic education), and 46 postgraduate students. The sample included 36 male and 90 female participants; their average age was 32 years. These participants responded to the 39-item scale by indicating the extent to which they agreed or disagreed with each statement using a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

2. Results
Using item-analysis methods (including exploratory factor analysis, item-scale correlations, convergent validity testing, and internal-consistency computation), we iteratively deleted 18 items due to redundancies and limited relation to the proposed construct. The procedure is explained hereon in more detail.

An initial item analysis was conducted to eliminate those with extremely low (<1.0) or high means (>4.2), and items with low item-total correlations (<.40) within each respective proposed scale. Item-total correlation indices and descriptive statistics such as kurtosis and multivariate outliers were estimated for each of the 39 items and on the basis of extreme skewness and/or other statistical assumptions violation, eight items were removed and 31 items were subjected to the next stage of analysis. In order to explore the underlying dimensions of Perceived Self Efficacy in Career the structure of the questionnaire was calculated through Principal Component Analysis. Oblique (instead of

orthogonal) rotation was used as the preferred rotation method, since the dimensions which were initially produced through orthogonal rotation of the axes resulted in moderately correlated factors. We initially imposed no restrictions and five dimensions emerged with a number of cross-loadings masking the dimension's identity. Based on the communality indices and on the reproduced correlation matrix, both indicating the items with the largest metric discrepancies, we progressively deleted six and then four more items, reaching a pool of 21 items which was subjected to Principal Component Analysis afresh.

An oblique rotation was again calculated for the reasons mentioned earlier. A four-factor solution, accounting for approximately 58% of the total variance was found and satisfied all psychometric and theoretical criteria set up to this point (Table 1). The first factor, *Career management* represents the individual's ability to cope adequately with career issues of practical and/or emotional nature. This factor consists of five items and accounts for 37.8% of the total variance. The second factor, *Career skills*, comprises six items that mainly have to do with the development of skills of organization and performance at work especially when working under harsh situations (7.83% of the total variance is explained by this factor). The third factor, *Flexibility at work*, highlights the ability of adaptation to transition, and/or represents the individual' ability to respond to the changes occurring in the work place; the factor is formed by four items and accounts for 6.88% of the total variance. The fourth factor, *Creativity at work*, represents the development of skills related to the active interest in career through creativity, ingenuity and PR skills. This factor (four items) accounts for 5.69% of the total variance. Based on this analysis, and although two items did not load on any of the factors, no further items were excluded as further deletion of items would start having an effect on the overall scale validity. The means, standard deviations, Cronbach's α internal-consistency reliabilities and correlation estimates across factors for the final 21-item version of the PSECS are presented in Table 1.