

# Career Decision-making Difficulties, Dysfunctional Thinking and Generalized Self-Efficacy of University Students in Greece

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## Abstract

The present study aims to examine the relationship of career decision-making difficulties, dysfunctional career thoughts and generalized self-efficacy, as factors involved in the decision-making process for university students. The study also investigates the influence of demographics and individual variables, and examines the predictive power of the Career Decision-making Difficulties Questionnaire (CDDQ) and the Generalized Self-Efficacy Scale (GSE) over the dimensions assessed by the Career Thoughts Inventory (CTI).

The results revealed statistically significant positive correlations between CDDQ factors (lack of information, inconsistent information, and lack of readiness) and total grade in Career Thoughts Inventory (CTI), decision-making confusion, commitment difficulty and lack of determination. On the other hand, the results show statistically significant negative correlations between all the aforementioned variables and generalized self-efficacy. Moreover, the generalized self-efficacy, as well as the CDDQ factors seemed to be predictors of the lack of determination, decision-making confusion and commitment difficulty. Finally, there is a discussion about the additionality of the CDDQ and CTI Questionnaires and advantages from their common use. Findings are discussed in the terms of the career counseling framework.

**Keywords:** Career decision-making difficulties, Career thoughts, Generalized self-efficacy

## 1. Introduction

In recent years, career indecision has become an increasingly important construct in the field of vocational psychology (Kelly & Lee, 2002). The concept of career indecision usually includes the individual's difficulties in his/her effort to

make career decisions. These difficulties are traced either before or during the decision-making process, are divided into cognitive or emotional difficulties and hinder the decision-making process (Osipow, Carney & Barak, 1976, cf Saka & Gati, 2007; Sidiropoulou-Dimakakou, 2010).

Gati, Krausz & Osipow (1996) developed a taxonomy of difficulties in career decision-making. In this taxonomy, the difficulties were defined as deviations from an “ideal career decision-maker”- a person who is aware of the need to make a career decision, willing to make such a decision and capable of making the decision “correctly”. Any deviation from this model was considered as a potential difficulty that could affect the individual's decision-making process in one of two possible ways: (a) by preventing the individual from making a career decision or (b) by leading to a less optimal career decision. The taxonomy includes three major categories of difficulty: lack of readiness to engage in the career decision-making process, lack of information (about the self, about the steps involved in the process, about the various alternatives and the sources of additional information) and inconsistent information (unreliable information, internal and external conflicts).

Young people around the world, upon completion of their academic studies in a specific scientific field, find themselves in a difficult position, as they have to move to career decision-making. For many young people, career choice represents a difficult and complicated process that can detain a state of indecision with negative, long-termed consequences in their professional, personal and social life (Osipow, 1999).

Recent studies revealed that a significant proportion of university students are undecided about their career paths (Lee, 2005) and that career indecision is related to various cognitive factors, such as career decision-making, self- efficacy (Creed & Patton, 2003), dysfunctional career thoughts (Sampson, Peterson, Lenz, Reardon & Saunders, 1998), lack of information (Germeijs & De Boeck, 2003), internal - external conflicts (Thompson & Subich, 2006), self-knowledge (Gati & Saka, 2001) and one's previous working experience (Lent, Brown, Talleyrand, McPartland, Davis, Chopra et al., 2002).

But, while each one of the above cognitive factors have separately been an object of numerous research (Saunders, Peterson, Sampson & Reardon, 2000; Roll & Arthur, 2002; Creed, Patton, & Prideaux, 2006), their co-examination has not been attempted (Austin, 2005). In the current study, research is being conducted regarding the difficulties in career decision-making, the dysfunctional beliefs and the perception of self-efficacy, as cognitive factors related to the career indecision of University students.

## **2. Career Decision-making Difficulties**

### *2.1 Dysfunctional career thoughts*

The dysfunctional career thoughts have been recognized as an important factor in the career decision-making process (Austin, Wagner & Dahl, 2003). They refer to prejudiced or twisted career beliefs, unreasonable expectations, various career myths, negative estimations regarding the individual's actions and professions, which influence each one's ambitions and his actions, leading to self-defeating experiences. For example, a person may erroneously attribute facts to his/her own self, while there is no rational base whatsoever for such a link. Thus, a person that has even intrinsically challenged the results of any skills test, can -by over-generalizing- reach the conclusion that all tools of career evaluation and the associated sources of information are a waste of time. Another person may perceive career alternatives either as perfectly satisfying or as globally inadequate (dichostatic thinking).

Such dysfunctional thoughts make the decision-making procedure harder and force the person to avoid it in its totality or to transfer the responsibility of choosing to significant others, jeopardizing this way one's overall career development. As a result, the individual may experience stress and lack of satisfaction from his/her choice, while one's self-estimation and trust to his/her ability on making important decisions is reduced (Krumboltz, 1994). In contrast, absence of negative and dysfunctional thoughts helps the individual to successfully combine his/her knowledge on him/herself and the business world (Saunders, Peterson, Sampson & Reardon, 2000). According to Dryden (1979), a person that asks for career counseling rarely avoids at least one unreasonable idea associated with his ability to make career decisions.

### *2.2 Lack of information*

Nathan & Hill (2006) support that the individual who seeks career counseling often cannot easily reach a decision because he/she doesn't have the information needed to base his/her choice, or because he/she doesn't know him/herself. The lack of a well figured self-perception and the lack of knowledge regarding the elements that compose the individual's personality (Gati & Saka, 2001), such as interests and abilities, drive the individual to confusion and hinder the decision-making process (Sampson, Peterson, Lenz, Reardon & Saunders, 1998). Moreover, lack of information on occupations, alternative choices, and ways of acquiring information, but also the career decision process itself, constitute difficulties that are accompanied with irresolution in choosing an occupation (Germeijs & De Boeck, 2003). Moreover,

the lack of correct information regarding the labor market can provoke confusion. Sometimes, the information that one uses is not recent or is not suitably presented by their source, without excluding the case where he/she unconsciously manipulates the information because of his/hers personal stance, beliefs and values. Not infrequently, new information can change the individual's decisions (Sidiropoulou - Dimakakou, 1995).

### *2.3 Internal – External conflicts*

In many cases, the person's efforts to make a specific career decision are interrupted because of the conflicts that are caused either by individual factors or by pressure from third parties or even by external factors, such as social, economic and political ones. Internal conflicts are of three types: a) Conflict of the type "approach-approach". This kind of conflict is experienced by the individual when he/she desires two contrasting things simultaneously and to the same extent. b) Conflict of the type "avoidance-avoidance". It is caused in circumstances where two contrasting things are undesirable simultaneously for the individual and to the same extent. c) Conflict of the type "approach-avoidance". It is expressed when the same object provokes attracting and compulsive force in the individual at the same time (Dimitropoulos, 2003). Moreover, the conflict between two different parts of the self, for example the creative and the conventional self, can lead the person to weakness in decision-making.

### *2.4 Self-efficacy*

Bandura (1977) introduced the concept of self-efficacy with which he declared the individual's subjective judgment concerning his/her ability to succeed in an activity or to confront a situation. Therefore, self-efficacy does not refer to whether a person is objectively capable or not, but to his personal beliefs whether he has the necessary skills to do something, under various circumstances (Kantas & Hantzi, 1991). According to the theory, the subjective estimation of the person's skills plays a decisive role in his vocational behavior (Bandura, 1997).

Research highlights the decisive effect of self-efficacy perceptions in career decision-making and in the articulated choices (Lent & Hackett, 1994). The higher the self-efficiency level people have concerning the fulfillment of their vocational roles, the higher interest displayed for the certain choices and the greater their persistence in following their career goals (Bandura, Barbaranelli, Caprara & Pastorelli, 2001). Low perception of self-efficacy in the career decision-making blocks the individual from being engaged in possible career choices (Betz & Serling, 1995, cf Betz & Luzzo, 1996). According to other research, young people that feel capable of successfully passing the procedure of career decision-making perceive less personal or external obstacles in the aforementioned procedure (McWhirter, Rasheed & Crothers, 2000) and show certainty in career choices (Argyropoulou, Sidiropoulou-Dimakakou & Besevegis 2007; Betz, Klein & Taylor, 1996). Indeed, Betz και Voyten (1997) defined self-efficacy, regarding career decision-making, as the most powerful forecasting factor for career indecision.

## **3. The Present Study**

The primary goal of the present study was to examine the relationship among career decision-making difficulties, dysfunctional career thoughts and generalized self-efficacy in a sample of University students. The second goal was to investigate how the previous variables are differentiated under the influence of specific demographic and individual variables. Finally, the present study aims to explore the possibility of predicting the Career Thoughts Inventory questionnaire factors by the Career Decision-making Difficulties Questionnaire and the Generalized Self-Efficacy factors; this last aim is a form of a criterion related validity attempt, resembling concurrent validity testing (Anastasi, 1990). The instruments employed in the present study are presented fully in the method section which follows.

## **4. Method**

### *4.1 Participants*

The sample of the study consisted of 260 final-year students of the University of Piraeus (N=260) from whom 88 (33.8%) were males and 172 (66.2%) were females. The female over-representation is partly a result of the sampling method (reported later in the "Procedure" section). From the total sample, 205 (78.8%) declared that they had some form of occupational experience; in respect to whether they had received support by Career Guidance Services, the majority of the sample (68.5%) replied negatively. Furthermore, 217 (83.5%) declared that the vocational domain linked to their Degree matched their interests. Finally, 159 students (61.2%) reported that they had not received any specific professional decision and among these, the majority (86.8%) reported finding it difficult to make a career decision. At the same time, out of the 101 students (38.8%) having made a particular career decision, the majority (58.4%) reported finding it difficult to make a career decision.

#### 4.2 Instrumentation

For the data collection, a number of questionnaires were employed:

(a) Career Thoughts Inventory (CTI) (Sampson, Peterson, Lenz, Reardon & Saunders, 1996; Kassotakis, Sidiropoulou-Dimakakou & Papadaku, 2005)

*Career Thoughts Inventory* is composed by 48 items, scored on a four-point Likert type scale by the respondents. An overall score is calculated, quantifying the level of existence of dysfunctional thoughts in an individual. Three separate scores that determine the type, the characteristics and the thoughts that people express are also calculated. These are achieved through the three following sub-scales: a) *Decision-making Confusion – DMC* scale (14 items), which refers to the individual's weakness to put into practice or to maintain the career decision-making process, as a result of weak feelings, lack of understanding of the career decision-making process itself and/or lack of capacity to combine the knowledge for him/herself with the knowledge for the professional world, b) *Commitment Anxiety – CA* scale (10 items), which counts the individual's weakness to commit him/herself to a specific career choice and a generalized concern for the result of the career decision process, and c) *External Conflict – EC* scale (5 items), which refers to the individual's difficulty to balance between the importance of his/her own opinion for him/herself and the importance of the relevant opinions of significant others, resulting to the individual's unwillingness to take responsibility for the decision making.

CTI was standardized for the Greek population by Kassotakis, Sidiropoulou-Dimakakou & Papadaku (2005). The overall estimated internal consistency (Cronbach's  $\alpha$ ) for the CTI was .91. The reliability indicators for the subscales are: a) lack of determination and self-estimation, .76, b) confusion in the decision making process (decision making confusion), .86 and c) difficulty in commitment, .80. These three subscales slightly differed from the original CTI ones and were described in the 2005 study through Exploratory Factor Analysis models. In this analysis, the three sub-scales explained 30.1% of the total variance. In the retrieved structure, the first scale includes 14 statements that express the individual's weakness to take decision-making action explaining 21.37% of variance. The second dimension includes 19 statements illustrating the individual's weakness to put into practice or to maintain the decision-making process because of his/her weakness to comprehend the procedure itself and its stages; 4.48% of the variance is explained by this component. The third dimension includes 8 statements expressing the individual's weakness to commit to a decision, i.e., to make a decision or reach a total of alternative solutions, and explains 4.21% of the total variance. All items are scored on a four-point Likert type scales (1=strongly disagree to 4=strongly agree). It is worth noticing that 7 statements were not a part of any of the three extracted dimensions. The Greek standardization structure was employed in the current analysis.

(b) Career Decision-making Difficulties Questionnaire (CDDQ) (Gati, Krausz & Osipow, 1996)

The *Career Decision-making Difficulties Questionnaire* is consisted of 34 items/statements investigating difficulties in decision-making regarding the career path. They are scored on a nine-point Likert type scale (1=does not describe me 9=describes me well). The items are classified in three categories/dimensions: 1) *Lack of readiness*, 2) *Lack of information* and 3) *Inconsistent information*. The first dimension includes three sub-categories of difficulties that may erase prior to the career decision-making process: a) lack of motivation to engage in the career decision-making process, b) general indecision and c) dysfunctional beliefs, which also include irrational expectations about the career decision-making process. The two remaining dimensions include difficulties that may arise during the career decision-making process. The *Lack of information* dimension includes: a) lack of information about the process, b) lack of information about the self, c) lack of information about the occupations and d) lack of information about the ways of obtaining additional information. Finally, the *Inconsistent information* dimension includes the following difficulty sub-categories: a) unreliable information, b) internal conflicts and c) external conflicts.

The "Lack of readiness" dimension includes 10 statements, the "Lack of information" dimension includes 12 statements and the "Contradictory information" dimension includes 10 statements. The reliability indicators (internal consistency), during the US standardization were .96 for the whole questionnaire, .92 for the Contradictory Information dimension, .96 for the Lack of Information dimension and .66 for the Lack of Readiness dimension. A concurrent validity check through a cross link with the Career Decision Scale (CDS), assessing professional indecision, reached a satisfactory .77 correlation with the difficulties in the career decision-making CDDQ score. For the sample in this current study, the internal consistency index (Cronbach's  $\alpha$ ) for the CDDQ reached .93.

(c) Generalized Self-Efficacy scale (GSE) (Jerusalem & Schwarzer, 1986, 1992, cf Schwarzer, 1993; Glynou, Schwarzer & Jerusalem, 1994)

The Generalized Self-Efficacy scale is the revised publication of an older form of the questionnaire by Jerusalem & Schwarzer (1986, cf Schwarzer, 1993). It consists of 10 questions scored on a four-point Likert type scale, where 1

Table 1. Pearson *r* indices between Career Thoughts and Career Decision-making Difficulties

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Total CTI	1																
2. Lack of determination and self-estimation	.86	1															
3. Confusion in decision making	.90	.64	1														
4. Difficulty in commitment	.76	.59	.57	1													
5. Lack of readiness	.47	.41	.46	.30	1												
6. <i>Lack of motivation</i>	.25	.10	.33	.20	.61	1											
7. General indecision	.45	.42	.40	.31	.65	.15	1										
8. Dysfunctional beliefs	.25	.29	.20	.11	.70	.09	.19	1									
9. Lack of information (LOI)	.64	.53	.62	.47	.55	.39	.48	.24	1								
10. <i>LOI about decision-making</i>	.59	.51	.57	.40	.52	.31	.47	.28	.82	1							
11. <i>LOI about self</i>	.58	.45	.61	.40	.52	.40	.42	.23	.90	.64	1						
12. <i>LOI about occupations</i>	.51	.44	.46	.42	.42	.30	.40	<u>.14</u>	.87	.59	.67	1					
13. <i>LOI about ways of obtaining additional information</i>	.51	.46	.47	.40	.42	.30	.37	.19	.87	.61	.71	.77	1				
14. Inconsistent information	.58	.41	.60	.45	.50	.41	.45	<u>.15</u>	.74	.55	.70	.64	.68	1			
15. <i>Unreliable information</i>	.53	.40	.53	.45	.48	.36	.44	.19	.70	.51	.68	.57	.66	.88	1		
16. <i>Internal conflicts</i>	.55	.37	.57	.44	.43	.37	.39	.12	.67	.51	.60	.60	.61	.93	.71	1	
17. <i>External conflicts</i>	.40	.27	.44	.23	.39	.34	.35	.10	.55	.40	.53	.47	.48	.78	.58	.62	1

All indices are statistically significant at the .01 level except for two underlined indices, for which  $p < .05$ ; non-significant indices are shown in italics.

Table 2. Regression analysis results: predictive power of the CDDQ dimensions over the CTI dimensions

Dependent variable	Independent variable	Regression Equation	<i>b</i> - lower limit (95%)	<i>b</i> - upper limit (95%)
Lack of determination and self-estimation	Lack of readiness	$Y_{\text{predicted}} = 24.792 + .19X$	.139	.243
	Lack of information	$Y_{\text{predicted}} = 26.075 + .14X$	.113	.168
	Inconsistent information	$Y_{\text{predicted}} = 28.083 + .14X$	.100	.175
Confusion in the decision-making	Lack of readiness	$Y_{\text{predicted}} = 23.868 + .30X$	.232	.375
	Lack of information	$Y_{\text{predicted}} = 25.551 + .23X$	.195	.267
	Inconsistent information	$Y_{\text{predicted}} = 26.715 + .28X$	.237	.330
Difficulty in commitment	Lack of readiness	$Y_{\text{predicted}} = 14.260 + .10X$	.058	.132
	Lack of information	$Y_{\text{predicted}} = 14.216 + .08X$	.065	.103
	Inconsistent information	$Y_{\text{predicted}} = 14.711 + .10X$	.076	.126

Dependent Variables	Matching of interests with vocational domain related to pursued Degree	N	M	S.D.	t	p	η <sup>2</sup>
Total CTI	Yes	217	102.41	14.96	-4.713	<.001	.08
	No	43	113.97	13.18			
Lack of determination and self-estimation	Yes	217	32.63	5.18	-2.550	<.01	.02
	No	43	34.76	4.00			
Confusion in the decision making	Yes	217	35.76	6.73	-6.144	<.001	.12
	No	43	42.44	6.50			
Difficulty in commitment	Yes	217	18.09	3.36	-2.547	<.01	.02
	No	43	19.53	3.46			

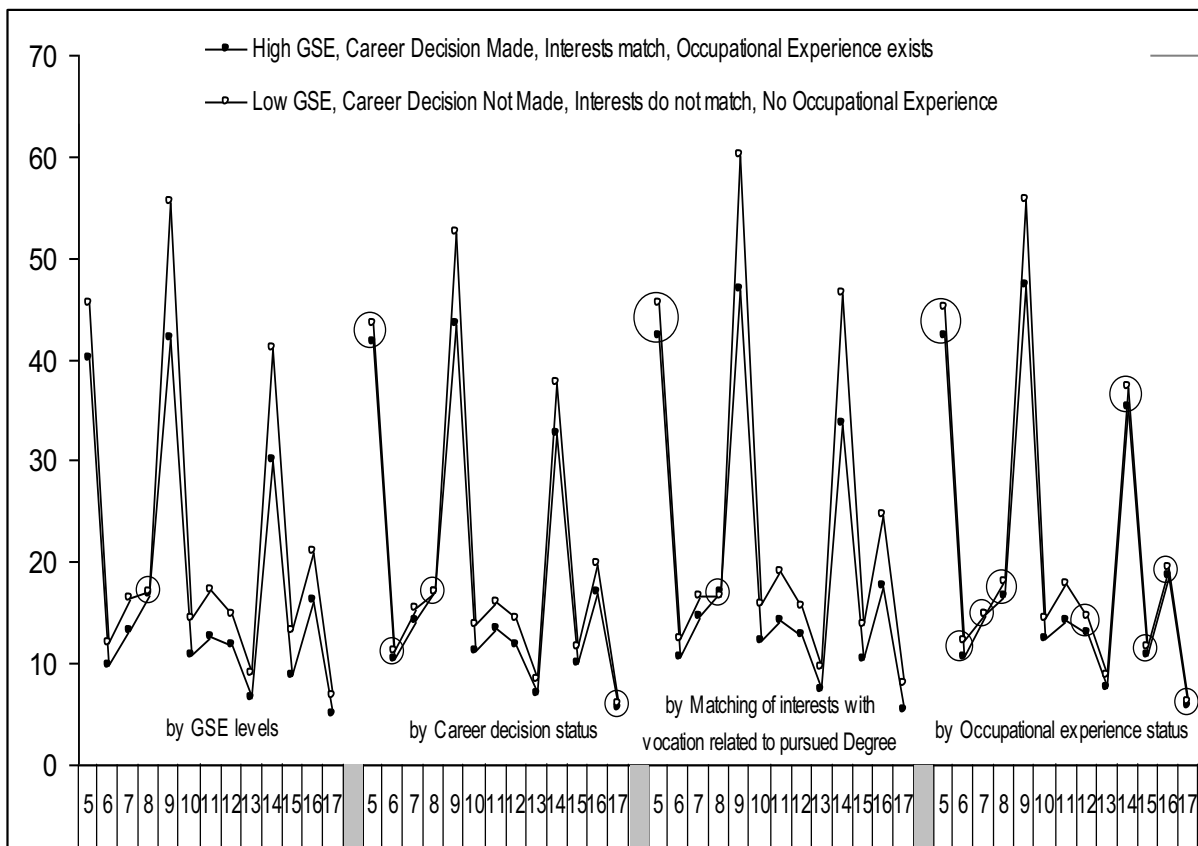


Figure 1. Mean scores for the CDDQ dimensions and subscales by four groupings according to GSE, Career Decision status, Matching or not of personal interests with occupation related to pursued Degree and, existence or not of Occupational experience.

Notes:

-Digits 5 to 17 correspond to the 13 CDDQ main dimensions and their sub-scales as these have been presented in Table 1.

-All dimensions and subscales are of different score range, thus the lines drawn are merely a practical aid in “reading” the figure and do not correspond to differences across dimensions and subscales.

-All differences across groups are statistically significant except for those depicted in circles. The “Dysfunctional beliefs” subscale differences across groups were not significant in any of the comparisons attempted; the “Lack of Readiness” dimension differences across groups were not significant in three out of four comparisons, etc.

-The least differentiating factor is the Occupational experience one and the most differentiating is the GSE-level grouping