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DOCTORAL SCHOOL **EDUCATION, REFLECTION, DEVELOPMENT**

ADOLESCENTS VOCATIONAL IDENTITY FORMATION

PhD thesis summary

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Key words: *adolescents, vocational identity, personality traits, career decision-making self-efficacy, career counseling program*

INTRODUCTION

The doctoral thesis entitled “ADOLESCENTS VOCATIONAL IDENTITY FORMATION” aimed the elaboration, implementation and testing efficiency of a career counseling program on the adolescents vocational identity development in 11th and 12th grade.

This doctoral thesis is structured in two parts, as follows: Part I- Theoretical Foundation (two chapters) and Part II- Research Methodology (four studies).

The first part of the thesis presents data from literature about vocational identity and the role of the career counseling during adolescence period. The first chapter “ADOLESCENCE IDENTITY” was focused on conceptual delimitations about the types of identity (gender, moral, sexual, cultural, ethnic identity), the description of factors that influencing the identity formation, the description of contemporary neo-eriksonian views of identity formation and Marcia’s identity statuses (1980). In the second theoretical chapter entitled “ADOLESCENT CAREER COUNSELING” was made a synthesis of definitions regarding the concept of career counseling, respectively a comparative analysis between career education and career counseling. In relation to this concept, were highlighted the contemporary theoretical approaches of career development: career construction theory and career development theory (Super & Savickas, 1996), cognitive career information processing approach (Peterson, Sampson & Reardon, 1991,1996) and social cognitive career theory (Lent et al., 1994). A subchapter was dedicated to the analysis of this construct at the School Curriculum level both in international context and the Romanian context, respectively the analysis of the contents and competencies targeted starting from preparatory class and up to 12th grade.

The second part of the thesis includes the practical contributions of the research. Thus, the first study was focused on the translation and linguistic adaptation of two instruments (VISA, Porfeli et al., 2011 și CDMSE-SF, Taylor & Betz, 1983) on the adolescent population from public schools. Translating the instruments into Romanian version could be of real useful for school counselors in adolescents evaluation process about choosing a profession. The second study was focused on identifying the predictors for career indecision in adolescence period, which, in my opinion, is an advantageous start for school counselors in setting priorities for their goals in counseling sessions development for adolescents in their school offices for psychological and pedagogical assistance. The third study aimed to investigate the relationship between personality factors, vocational identity and career decision-making self-efficacy for adolescents in 11th and

12th grade and the last study has proposed to test a career counseling program on adolescents vocational identity development. The impact of these counseling sessions held in the chosen educational institutions for this thesis was remarkable. Through these meetings, adolescents was able get to know themselves better, to prioritize their values in order to choose a professional domain compatible with their desires, interests and aspirations, they accumulated a rich informational luggage about professional requirements, professional training requirements, the professional conditions related to the occupations that interest them, they could managed to plan SMART goals for the chosen career and finally they had acquired some methods and strategies for personal promotion.

The thesis ends with the presentation of the general conclusions, the limits of the research, the bibliographical references consulted and the annexes.

PART I: THEORETICAL FOUNDATION

I. ADOLESCENCE IDENTITY

Searching for identity- which Erikson defined as a coherent concept about oneself composed of goals, values and beliefs to which a person is committed- comes to the fore in adolescence. Cognitive development allows for adolescents to construct a “theory of self”(Elkind, 1998). As Erikson (1950) pointed out, the adolescent’s effort to understand himself is not „a kind of anxiety related to growing up” but “is taking part from a healthy, vital process which is based on the acquisition of previous stages- trust, autonomy, initiative and diligence- and lays the necessary foundations to face up the adulthood challenges” (Papalia, Olds & Feldman, 2010, p. 390).

The content of identity tends to fall within two major domains, *the ideological domain* consisting of choices regarding career or occupation, religion, and politics (Grotevant, Thorbecke, & Meyer, 1982), and *the interpersonal domain* comprising family, dating, or romantic relationships, friendships, and sex roles (Balistreri, Busch-Rossnagel, & Geisinger, 1995). The relative importance of identity options within these domains for an adolescent depends on what is accepted and valued in their respective culture (Phinney & Baldelomar, 2011).

Identity represents an active process of developing an understanding of “who I was, who I am and who I will be” (Cox & McAdams, 2010, p. 20), and forming the best possible sense of identity still requires an active exploration of possibilities and a decision to commit to certain values, goals and activities that will sustain how one sees oneself and who others confirm one to be (La Guardia, 2009).

Identity development in adolescence period is a complex process that has many specialized components. In addition to Erikson’s (1968) overall theory of identity formation, adolescents also develop more specialized identities, such as political (Schmitt, Dayanim, & Matthias, 2008), gender (Wigfield & Wagner, 2005), ethnic/cultural (French, Seidman, Allen, & Aber, 2006), sexual (Erikson, 1968), and moral (Hart, Atkins, & Ford, 1999).

Erikson and his psychosocial theory introduced the notion of identity to psychological research. On the basis of his work, the following models were proposed: Marcia’s (1966) status paradigm, which was further extended into process-oriented models (Crocetti, Rubini, & Meeus, 2008; Grotevant et al., 1987; Luyckx et al., 2008; Whitbourne, Sneed, & Skultety, 2002), the social-cognitive model of identity styles (Berzonsky, 1989), the eudaimonic identity model

(Waterman, 1982) and the integrative Circumplex of Identity Formation Modes model (Cieciuch & Toplewska, 2017).

In Holland's view (1997), identity refers to an individual's ability to integrate personal values and self-knowledge with self-confidence and readiness to explore, plan, and adapt to the vocational world.

Furthermore, adolescent identity formation has largely been conceptualized as adolescents' answer to the questions "Who am I?" and "What kind of person do I want to be?" (LaGuardia, 2009). Within this broad question, some researchers (Eccles, 2009; Skorikov & Vondracek, 1998) emphasize that one central aspect of identity development is vocational identity, or young people's answers to the question "What do I want to be when I grow up?". Although these questions are essential to understanding adolescent identity development, Yeager, Bundick & Johnos (2012) consider that, for a broader conceptualization of adolescent identity development they should also reflect on the following question: "Why am I?". By providing the answer to this questions, adolescents are not compelled to discover what kind of person they are and what kind of work they would like to do, but they are also interested in understanding what their place is in the world (Yeager & Bundick, 2009). In addition to this, these researchers claim that both self-oriented and beyond-the-self-oriented motives for life goals are important components of how adolescents construct their identities and of how these identities promote optimal development.

"According to Erikson (1968), identity is formed as teenagers solve three major problems: choosing an occupation, adopting the values they will be guided by and shaping a satisfying sexual identity" (Papalia, Olds & Feldman, 2010, p. 390).

Searching the literature, the vocational identity development is associated with many positive outcomes on the career decision-making process, including: differentiating career-related interests (Nauta & Kahn, 2007), exploratory behavior (Gushue, Scanlan, Pantzer & Clarke, 2006), self-knowledge and major congruence between studies and career (Leong, 1998). Also, vocational identity was positively associated with psychological well-being; adolescents who have well-established career goals are more satisfied than those who have diffuse and unstable goals (Strauser, Lustig & Ciftci, 2008). Otherwise, lack of vocational identity development can lead to an increased level of career indecision, role ambiguity and negative consequences on adolescent mental health such as depression, anxiety, low self-esteem (Leong & Morris, 1989; Strausser et. al., 2008). In addition, some interpersonal characteristics (for example: personality

traits, values, interests and beliefs related to self-efficacy) have been shown to be closely related to the vocational identity development (Shin & Kelly, 2013; Lopez, 1989; Sweeney & Schill, 1998).

Thus, vocational identity gives self-confidence, the sense of acting in a responsible manner, and enables one to be aware of one's limitations, abilities, and potential (Reybold, 2003, Krabi, 2008).

Erikson's lifespan theory of psychosocial development (1950, 1968) was a pioneering contribution to the field of identity studies. Based on Erikson's ego identity concept (1959), Marcia (1966) distinguishes two identity dimensions:

1. **Exploration** which includes actively questioning and weighing of various identity alternatives before making decisions about the values, beliefs, and goals that one will pursue.

2. **Commitment** which refers to making a relatively firm choice about an identity domain and engaging in significant activities geared toward the implementation of that choice (Crocetti, Klimstra, Hale, Koot & Meeus, 2013).

Starting from these dimensions, adolescents can be classified in one out of four identity statuses:

- 1) **The foreclosure identity**- the adolescent has specified occupational objectives, but these have been taken uncritically either from parents or from colleagues or other significant persons.

- 2) **The moratorium identity** – the adolescent faces up with identity problems, feels pressure to make an educational or occupational choice, but the choice is always postponed.

- 3) **The diffusion status** – the adolescent does not feel pressure to make a choice, despite the approaching moment of choice and is not concerned with making a commitment in a certain direction.

- 4) **The achievement status** –adolescents have made a commitment following a period of active exploration.

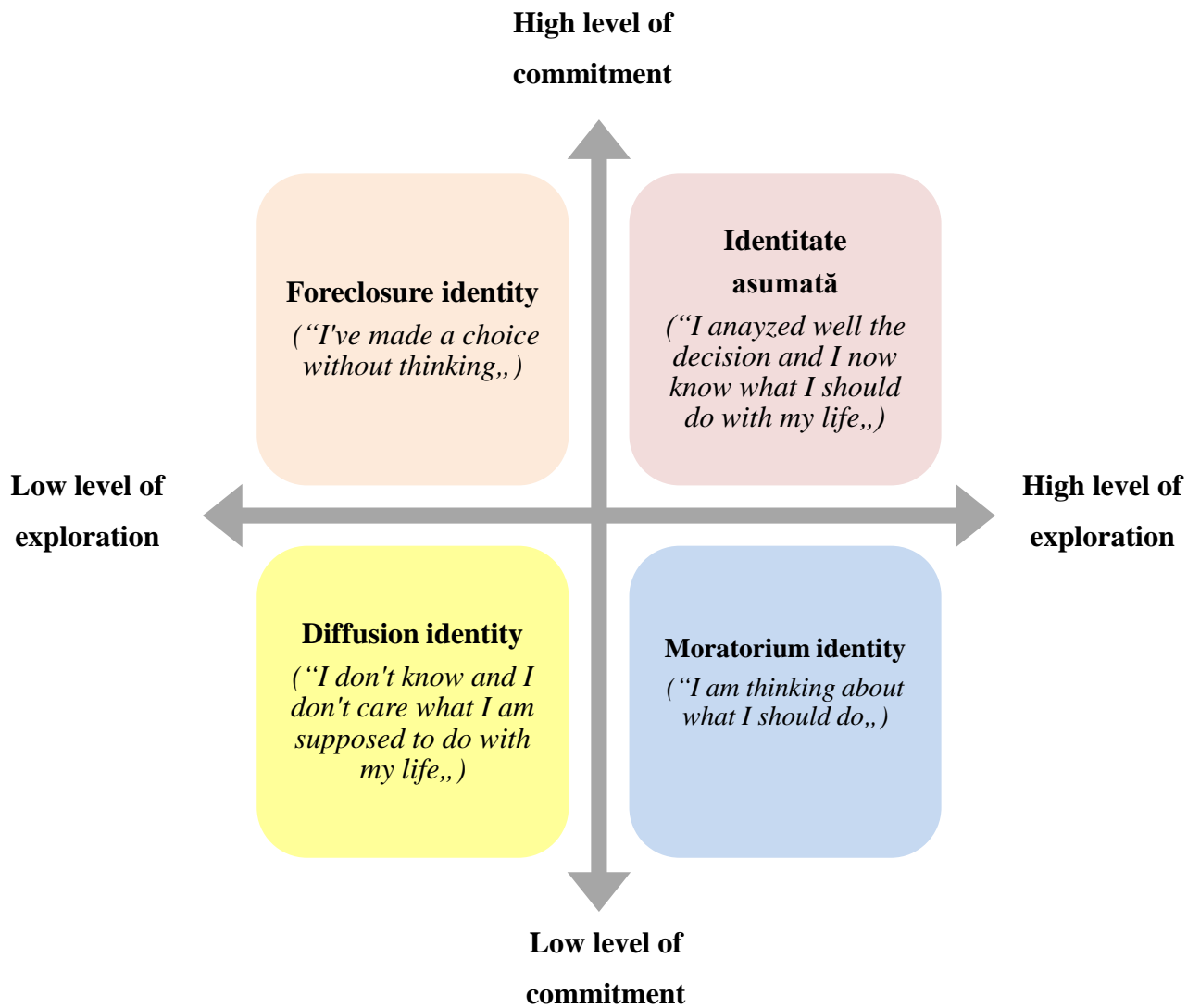


Figura I.3. Adolescents vocational identity statuses (Marcia, 1980)

Some researchers (Law, Meijers & Wijers, 2002) believe that the development of vocational identity is a learning process that confronts the individual with seven challenges::

1. To be aware of personal feelings.
2. To differentiate self from others.
3. To develop a personal narrative.
4. To represent experience in one's own terms.
5. To focus on personal and professional goals.
6. To build an inner life.
7. To relate to one's own purposes.

II. ADOLESCENT CAREER COUNSELING

One of the most important decisions that shape a adolescent's life is the decision related to career choice. Career choice is a long process requiring specialization, which requires the individual to join several activities and receive feedback to define and develop awareness on personal traits and career choice strategies (Atli, 2016).

Emphasis on career education in high school subject courses may be effective because secondary students are more likely concerned about their career options and may have a better idea of their life direction. Beginning career education at an early stage helps students relate their academic work with future plans and promotes active citizenship (Truong, 2011).

Career counseling aims to develop the skills of a person or group of people to solve a specific problem related to career (indecision, career anxiety, academic dissatisfaction, career plan, etc.). Career counseling is essentially a psychological intervention, in which the person, through supportive interventions, develops personal resources to establish, implement and adjust their life plans, both in the short and long term.

Career development programs can be defined as “a systematic program of providing information and experiences coordinated by the counselor, designed to facilitate professional development” (Herr & Cramer, 1996, p. 33). These programs usually contain “goals, objectives, activities and methods for evaluating the effectiveness of activities in achieving the proposed objectives” (Niles & Harris-Bowlsbey, 2015, p. 31)

The extensive literature on adolescents career development helps counselors to identify appropriate goals and interventions in the domain for high school students. „The specific skills for career development identified as suitable for high school students are:

1. *Deeping self-knowledge*
 - a) Developing skills to intercat positively with others.
 - b) Understanding the impact of continous growth and evolution for career planning.
2. *Skills development for educational and occupational exploration*
 - a) Understanding the relationship between educational achievement and career planning.
 - b) Understanding the need for positive attitudes toward work and learning.
 - c) Skills development to locate, evaluate, and interpret career information.
 - d) Skills development to prepare to seek a job.

e) Understanding how societal needs and functions influence the nature and structure of work.

3. *Decision-making skills consolidation*

a) Understand the interrelationship of life roles.

b) Understanding the continuous changes changing male/female roles.

c) Developing skills of career planning” (Niles & Harris-Bowlsbey, 2015, p. 389-390).

According to Super (1990), the ability to make career choices “involves five dimensions:

1. An attitude characterized by the generation of plans towards the management of career stages and professional tasks.

2. Gathering information about educational and professional options..

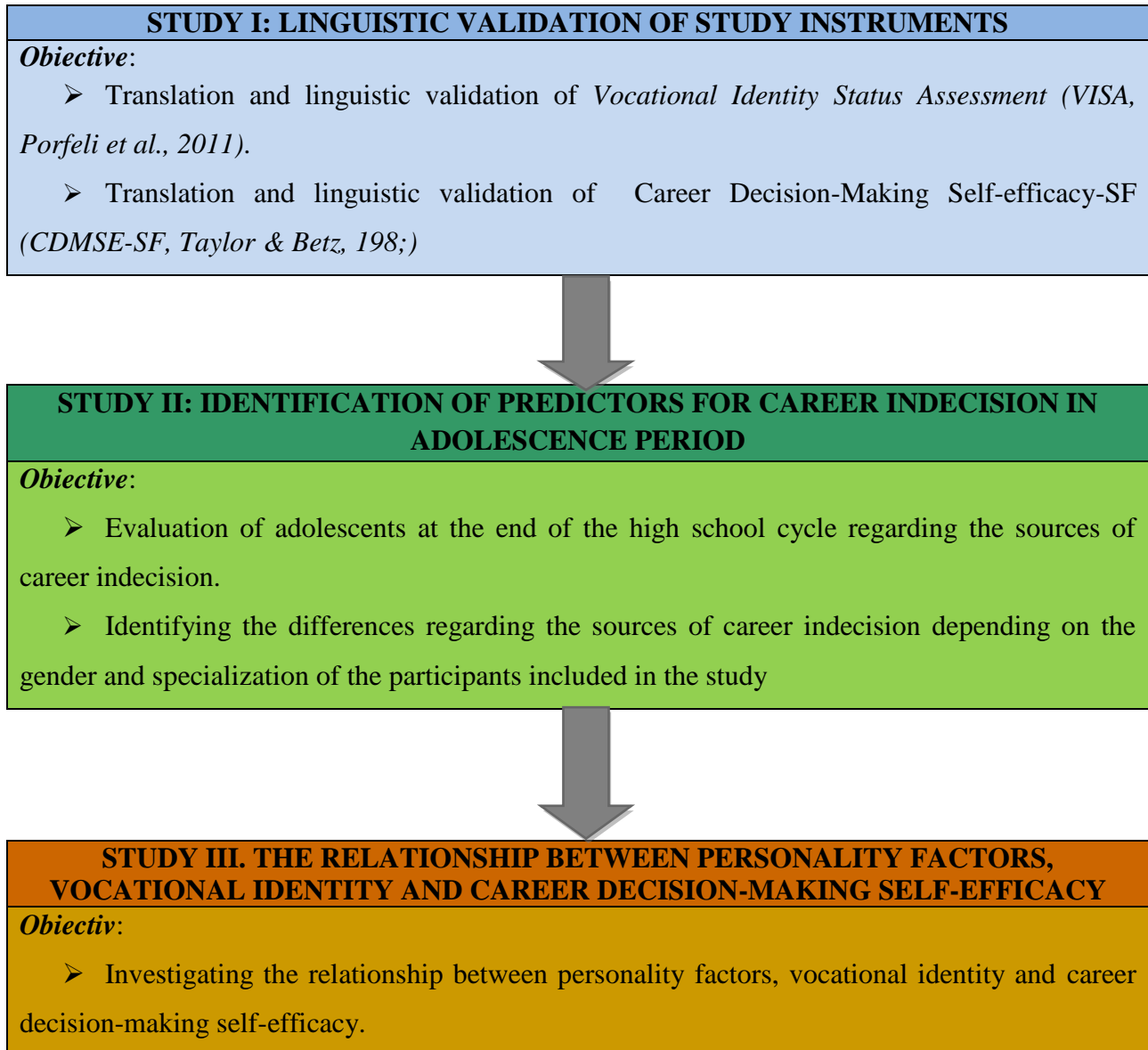
3. Exploring the world of work.

4. Knowledge of how to make good career decisions.

5. Ability to realistically evaluate potential occupations” (Super, 1990, p. 231).

PART II: PEDAGOGICAL RESEARCH: DEVELOPING, IMPLEMENTING AND TESTING THE EFFICIENCY OF A CAREER COUNSELING PROGRAM FOR THE ADOLESCENTS VOCATIONAL IDENTITY FORMATION

The main aim of this thesis was to test the efficiency of a career counseling program for the adolescents vocational identity development. Consistent with the main aim of this research, we was focused on achieving the following objectives:



STUDY IV: TESTING THE EFFICIENCY OF A CAREER COUNSELING PROGRAM FOR THE ADOLESCENTS VOCATIONAL IDENTITY FORMATION

Objective:

- Elaboration and implementation of a career counseling program regarding the adolescents vocational identity development of the adolescents participating in the study starting from the analysis of the needs identified in the pre-test;
- Analysis of the efficiency level of the intervention program for career development implemented in order to increase the confidence of adolescents in their own ability to make favorable decisions for the future;;
- Verification of the impact that the intervention program had on the acquisition of a favorable vocational identity for the process of choosing a career..

III. STUDY I: LINGUISTIC VALIDATION OF STUDY INSTRUMENTS

III.1. Linguistic validation of Vocational Identity Status Assessment (VISA, Porfeli et al., 2011)

The aim of this study was to provide a translated, linguistically validated and pre-tested version of VISA (Porfeli et al., 2011) on the adolescent population from public schools.

Porfeli and colleagues (Porfeli, 2009; Porfeli et al., 2011) created the Vocational Identity Status Assessment (VISA), which is based on overall identity findings by three prominent researchers. First, they utilized Marcia's (1966, 1993) research, which set the foundation that identity develops from exploration and commitment. Then they applied more recent research by Meeus, Crocetti and colleagues who used designations of Commitment, Exploration, and Reconsideration of Commitment (Crocetti, Klinstra, Keijsers, Hale & Meeus, 2009; Crocetti et al., 2008; Crocetti, Schwarts et al., 2010). Lastly, Porfeli et al. (2011) incorporated Luyckx and colleagues' research, which used designations of Exploration in Breadth and Exploration in Depth, Commitment Making, and Identification with Commitment (Luyckx, Goosens, Beyers & Soenens, 2006).

Using the new VISA instrument, Porfeli et al. (2011) identified six vocational identity statuses: the four identity statuses of Marcia's and two additional statuses: *searching moratorium* and *undifferentiated status*. These vocational identity statuses were discovered using the constructs of "Career Exploration" (which encompassed the two items of in-breadth & in-depth career exploration), "Career Commitment" (which encompassed the two items of career commitment making and identification with career commitment), and "Career Reconsideration" (which encompassed the two items of career self-doubt and career flexibility).

Therefore, this questionnaire contains 30 items that are evaluated on a Likert scale at 1 to 5, where 1 represents "strongly disagree" and 5 "strongly agree", the items being grouped in three dimensions, and each dimension operationalized by two subscales::

I. Career commitment:

✓ *Commitment making* subscale : example of item: „I have invested a lot of energy into preparing for my chosen career.”;

✓ *Commitment identification* subscale: example of item: „ Becoming a worker in my chosen career will allow me to become the person I dream to be”.

II. Career exploration:

❖ In-depth exploration subscale: example of item: „Trying to find people that share my career interests”.

❖ In-breadth exploration subscale: example of item: „casually learning about careers that are unfamiliar to me in order to find a few to explore further”.

III. Career reconsideration:

➤ Career commitment flexibility subscale: example of item: „ My career choice might turn out to be different than I expect”;

➤ Career self-doubt subscale: example of item: „Thinking about choosing a career makes me feel uneasy”(Porfeli, Lee, Vondracek, & Weigold, 2011).

Regarding the characteristics related to validity, the α Cronbach coefficient for subscales varies between .67 and .83 for the Italian version (Porfeli et. Al., 2011), and for the Romanian version Negru-Subțirică et al. (2015) performed a confirmatory factor analysis and found that the initial structure with six factors match the current data ($X^2 = 158,103$, $df = 156,103$, $df = 39$; $CFI = .972$, $RMSEA = .051$; $SRMR = .026$).

III.1.3. Results

Firstly, the internal consistency coefficients were calculated and descriptive statistical analyzes were performed for the two versions of the scale (original and translated). Alpha internal consistency coefficients (Cronbach, 1951) were calculated for each subscale (Career commitment, Commitment identification, Career commitment flexibility and Career self-doubt).

Table III.1. Means standard deviations, median and Alpha Cronbach (based on standardized items) for the VISA scales selected

	Pre-Test (English version)				Post-Test (Romanian version)			
	M	AS	Mdn	α	M	AS	Mdn	α
VISA SUBSCALES								
1. Career commitment	2.95	.71	2.90	.737	3.38	.68	3.40	.789
2. Commitment identification	3.66	.92	3.70	.850	3.86	.83	4	.846
3. Career commitment flexibility	3.01	.69	3	.797	3	.77	2.80	.850
4. Career self-doubt	2.69	.85	2.4	.736	2.61	.96	2.40	.862

After we calculated the Alpha Cronbach coefficient we obtained for: the 5 items of the first subscale a coefficient equal with .737, the 5 items of the second subscale a coefficient equal with .850, the 5 items for penultimate subscale a coefficient equal with .797 and the 5 items for the last subscale a coefficient equal with .736 in English version. Similarly, for the equivalent of the items in Romanian, the Alpha Cronbach coefficients were: .789 for Career commitment subscale,

.846 for Commitment identification, .850 for Career commitment flexibility subscale and .862 for Career self-doubt, with a coefficient for the general scale equal with .815.

Table III.2. *Wilcoxon Signed Rank Test used for the VISA selected subscales*

	Z	p (bilateral)
VISA scale	-4.72	.000
VISA subscale		
1. Career commitment	-2.589	.010
2. Commitment identification	-1.972	.050
3. Career commitment flexibility	-.030	.977
4. Career self-doubt	-1.116	.264

Then, to test the equivalence of the two language versions of the questionnaire, the non-parametric Wilcoxon Signed Rank test and Spearman correlation was applied. The obtained results indicate that between the selected VISA subscales there is a statistically significant difference between the two language versions ($Z = -4.72$, $p = .00$). Particularly, it is observed that there are significant differences between the Career Commitment subscales ($Z = -2,589$, $p = .01$) and Commitment identification ($Z = -1,972$, $p = .05$), but between the Career commitment flexibility subscales ($Z = -.030$, $p = .97$) and Career Self-doubts subscales ($Z = -1.116$, $p = .26$) there is no difference, which indicates some equivalence of the two language versions.

III.1.4. Conclusions

The present study aimed to translate and linguistically validate of Vocational Identity Status Assessment (VISA, Porfeli et al., 2011) in Romanian to help school counselors in the adolescents evaluation process with regarding the choice of the vocational route can be used with other tools necessary for this process.

The results showed some linguistic equivalence, but from a statistical point of view it was shown that there are no significant differences between the two language versions between the Career commitment flexibility subscales ($Z = -.030$, $p = .97$) and Career Self-doubts subscales ($Z = -1.116$, $p = .26$). In addition to these aspects, positive and statistically significant correlations were found between subscales, except for the insignificant correlation of the last item of the first subscale.

III.2. Linguistic validation of *Career Decision-Making Self-efficacy-SF (CDMSE-SF, Taylor & Betz, 1983)*

Career Decision- Making Self-Efficacy-Short Form Scale

This instrument measures confidence in one's ability to make optimal career decisions. It contains 25 items rated on a Likert scale from 1 to 5, where 1 represents "no confidence at all" and 5 "complete confidence"; the items being divided into the following five subscales:

- *Self-appraisal*: items 5,9,14,18,22;
- *Gathering occupational information*: items 1,10,15,19,23
- *Goal selection*: items 2,6,11,16,20
- *Making plans for the future*: items 3,7,12,21,24
- *Problem solving*: items 4,8,13,17,25.

Betz et al. (1996) reported subscale alphas ranging from 0.73 to 0.83, and a total score alpha of 0.94 in a college sample. Also, Betz and Voyten (1997), also with a college sample, reported internal reliability coefficients for the subscales ranging from .69 to .83, and a total score coefficient of .93. Gloria and Hird (1999) reported total score coefficients of .95 for white college students and .97 for racial/ethnic minority college students. Instead, Watson, Brand, Stead, and Ellis (2001) studied a sample of South African university students and reported only one subscale with an internal reliability below .70, and a total score coefficient of .91.

In addition, Hampton (2006) validated this scale on a group of Chinese adolescents and obtained a α Cronbach between .68-.80 for subscales and an α Cronbach .93 for the entire scale. Gaudron (2011) obtained a α Cronbach coefficient of .69-.73 for subscales and a α Cronbach coefficient of .87 after the validation of this scale on a group of French adolescents, while Presti et. al. (2013) obtained a α Cronbach coefficient of .58-.69 for subscales and a α Cronbach coefficient of .89 following the validation of this scale on a group of Italian adolescents, while Buyukgoze-Kavas (2014) obtained the validation of this instrument on a group of Turkish adolescents obtained a α Cronbach coefficient of .64-.77 for subscales and a α Cronbach coefficient of .88 for the whole scale.

III.2.3. Results

Firstly, the internal consistency coefficients were calculated and descriptive statistical analyzes were performed for the two versions of the scale (original and translated). Alpha internal consistency coefficients (Cronbach, 1951) were calculated for each subscale (Self-appraisal, Gathering occupational information, Goal selection, Making plans for the future, Problem solving).

Table III.8. Means standard deviations, median and Alpha Cronbach (based on standardized items) for the CDMSE-SF scales selected

	Pre-Test (English version)				Post-Test (Romanian version)			
	M	AS	Mdn	α	M	AS	Mdn	α
CDMSE-SF SUBSCALES								
1. Self-appraisal	3.66	.68	3.8	.736	3.53	.66	3.60	.739
2. Gathering occupational information	3.48	.70	3.50	.764	3.53	.78	3.60	.828
3. Goal selection	3.65	.71	3.70	.796	3.60	.87	3.80	.857
4. Making plans for the future	3.50	.55	3.60	.541	3.44	.53	3.40	.510
5. Problem solving	3.39	.57	3.40	.516	3.39	.57	3.60	.497

According to the results obtained from table III.8, we obtained for: the 5 items of the first subscale an α Cronbach coefficient of .736, the 5 items for the second subscale an α Cronbach coefficient of .764, the 5 items for the the third subscale has an α Cronbach coefficient of .796, the 5 items for the penultimate subscale an α Cronbach coefficient of .541 and the 5 items for the last subscale a coefficient of .516 in the English version. Similarly, for the equivalent of items in Romanian, the Alpha Cronbach coefficients were .739 for the Self-appraisal subscale, .828 for the Gathering occupational information subscale, .857 for the Goal selection subscale, .510 for the Making plans for the future subscale, and .497 for the Problem solving subscale. problems, with a general scale of .872.

În al doilea rând, pentru a testa echivalența celor două versiuni lingvistice ale chestionarului, s-a aplicat testul neparametric Wilcoxon al rangurilor pereche și corelația Spearman.

Table III.9. Wilcoxon Signed Rank Test used for the CDMSE-SF selected subscales

	Z	p (bilateral)
CDMSE-SF SCALE	-.195	.846
Subscale CDMSE-SF		
1. Self-appraisal	-1.155	.24
2. Gathering occupational information	-.038	.97
3. Goal selection	-.456	.65
4. Making plans for the future	-.405	.68
5. Problem solving	-.361	.71

The results obtained indicate that between the selected CDMSE-SF subscales there is no statistically significant difference between the two language versions ($Z = -.195$, $p = .84$), but particularly, it is observed that there is no significant differences between, indicating that there is no equivalence of the two language versions.

III.2.4. Conclusions

The present study aimed to translate and linguistically validate of Career Decision- Making Self-Efficacy-Short Form Scale (CDMSE-SF, Taylor & Betz, 1983) in Romanian to help school counselors in the adolescents evaluation process with regarding the choice of the vocational route can be used with other tools necessary for this process.

According to the results of the Wilcoxon Test (Wilcoxon, 1945), the two CDMSE-SF versions (i.e. Romanian, English) are not linguistically equivalent. In addition, there were statistically significant positive correlations between subscales, with the exception of insignificant correlations of the last item of the second subscale and the last subscale.

IV. STUDY II: IDENTIFICATION OF PREDICTORS FOR CAREER INDECISION IN ADOLESCENCE PERIOD

The purpose of this study is to identify the sources of career indecision among adolescents in the 11th and 12th grades, respectively, focusing on the following objectives:

- Evaluation of adolescents at the end of high school on the sources of career indecision.
- Identifying the differences regarding the sources of career indecision depending on the gender and specialization of the participants included in the study.

The participants of this study were 300 adolescents of the 11th and 12th grades, aged 16-18 ($M_{age} = 17$ years, $AS_{age} = .81$), students of the National College "Dragoș-Vodă", "Marmația" Technological High School and "Regele Ferdinand" Pedagogical College from Sighetu-Marmației, Maramureș County. The adolescents chosen for this study are part of the following profiles: real (specializations: mathematics-computer science and natural sciences), services (specializations: economics, trade, tourism and alimentation) and human (specialization: philology).

The instruments that have been used in this research are::

- *Career Decision- Making Self-Efficacy- Short Form Scale*
- *Vocational Identity Status Assessment, VISA*
- *NEO Five-Factor Inventory*

IV.3. Results

In order to verify the existence of a difference in the sources of career indecision according to the gender of the participants included in the study, the Independent T-test was applied.

Table IV.6. *Independent T-test results*

Variable	Levene's test		t	Degree of freedom	p
	F	Sig.			
<i>Career commitment</i>	1.82	.17	.84	298	.40
<i>Commitment identification</i>	1.79	.18	.68	298	.49
<i>Career commitment flexibility</i>	.005	.94	1.78	298	.07
<i>Career self-doubt</i>	1.97	.16	1.60	298	.11
<i>Self-appraisal</i>	1.81	.18	.66	298	.50
<i>Gathering occupational information</i>	3.01	.08	1.78	298	.07

<i>Goal selection</i>	.15	.69	.99	298	.32
<i>Making plans for the future</i>	1.43	.23	.17	298	.86
<i>Problem solving</i>	1.91	.16	.01	298	.98
<i>Neuroticism</i>	.002	.96	3**	298	.003
<i>Extraversion</i>	2.91	.09	.36	298	.72
<i>Openness</i>	1.08	.29	.34	298	.73
<i>Agreeableness</i>	.01	.89	2.39*	298	.017
<i>Conscientiousness</i>	.34	.55	1.64	298	.10

*p<0.05, **p<0.01

Analyzing the results in Table IV.6, it can be seen that male adolescents and female adolescents face difficulties with the following sources of career indecision: self-appraisal, goal selection, making plans for the future and problem solving. Regarding the vocational identity, the strongest identity is the one related to the commitment identification (M = 19.96; AS = 3.65 for boys and M = 20.23; AS = 3.26 for girls) (according to Marcia' identity status is similar to the diffuse identity status). Thus, adolescents with a high level of this identity status have a low level of commitment without feeling pressure to make a choice. At the level of personality traits, there are statistically significant differences in neuroticism ($t(298) = 3, p = .003$) and agreeableness ($t(298) = 2.39, p = .017$). Therefore, girls (M = 38.88; AS = 6.45) have a higher level of insecurity, instability and fear compared to boys (M = 36.65; AS = 6.42) who are calmer and more independent in choosing a career. In addition, boys (M = 40.05; AS = 5.44) have a high level of agreeableness to girls (M = 38.60; AS = 5) which indicates that they are more flexible and cooperative than girls who are more distrustful. on their own and have a high level of criticism when it comes to making a career decision.

In the case of the second unidirectional hypothesis, in order to observe if there are significant differences regarding the sources of career indecision depending on the study profile, it was calculated One-Way ANOVA.

Table IV.9. *One-Way Analysis of Variance for comparing the averages of career indecision sources according to the study profile*

Variable		SS	df	MS	F	p	η
<i>Career commitment</i>	Intergroup	,50	2	,25	,014	,98	.01
	Intragroup	5212,09	297	17,5			
	Total	5212,59	299				
<i>Commitment identification</i>	Intergroup	20,64	2	10,32	,86	,42	.07
	Intragroup	3559,55	297	11,98			
	Total	3580,19	299				
<i>Career commitment flexibility</i>	Intergroup	62,90	2	31,45	2,50	,08	.13
	Intragroup	3736,76	297	12,58			
	Total	3799,66	299				
<i>Career self-doubt</i>	Intergroup	115,04	2	57,52	3,70*	,02	.15
	Intragroup	4612,10	297	15,52			
	Total	4727,14	299				
<i>Self-appraisal</i>	Intergroup	204,48	2	102,24	9,41**	,00	.24
	Intragroup	3224,11	297	10,85			
	Total	3428,59	299				
<i>Gathering occupational information</i>	Intergroup	62,34	2	31,17	2,72	,06	.13
	Intragroup	3395,99	297	11,43			
	Total	3458,33	299				
<i>Goal selection</i>	Intergroup	151,20	2	75,60	7,49**	,00	.22
	Intragroup	2996,34	297	10,08			
	Total	3147,54	299				
<i>Making plans for the future</i>	Intergroup	137,12	2	68,56	6,70**	,00	.20
	Intragroup	3038,54	297	10,23			
	Total	3175,66	299				
<i>Problem solving</i>	Intergroup	212,24	2	106,12	8,56**	,00	.23
	Intragroup	3681,95	297	12,39			
	Total	3894,19	299				
<i>Neuroticism</i>	Intergroup	526,94	2	263,47	6,41**	,00	.20
	Intragroup	12196,19	297	41,06			
	Total	12723,13	299				
<i>Extraversion</i>	Intergroup	25,62	2	12,81	,63	,53	.06
	Intragroup	5989,16	297	20,16			
	Total	6014,78	299				
<i>Openness</i>	Intergroup	115,72	2	57,86	2,89	,057	.13
	Intragroup	5929,91	297	19,96			
	Total	6045,63	299				

<i>Agreeableness</i>	Intergroup	77,42	2	38,71	1,39	,24	.09
	Intragroup	8232,91	297	27,72			
	Total	8310,33	299				
<i>Conscientiousness</i>	Intergroup	176,10	2	88,05	3,63*	,02	.15
	Intragroup	7198,89	297	24,23			
	Total	7374,99	299				

*p<0.05, **p<0.01

Based on the results obtained, it was found that there are some statistically significant differences depending on the study profile variable in terms of: identity status, career self-doubts ($F(2,297) = 3.70$; $p = .02$), self-appraisal ($F(2,297) = 9.41$; $p = .00$), goal selection ($F(2,297) = 7.49$; $p = .01$), making plans for the future ($F(2,297) = 6.70$; $p = .01$), problem solving ($F(2,297) = 8.56$; $p = .00$), neuroticism ($F(2,297) = 6.41$; $p = .02$) and conscientiousness ($F(2,297) = 3.63$; $p = .02$). Thus, adolescents who are part of the profile based-services encounter difficulties related to: self-appraisal ($M = 19.87$; $AS = 2.95$), gathering occupational information ($M = 18.35$; $AS = 2.73$) and goal selection ($M = 19.11$; $AS = 2.44$). In addition, both adolescents in the profile based-services and those in the human study profile encounter difficulties regarding the making plans for the future ($M = 19.31$; $AS = 2.95$ for the profile-based services; $M = 18.03$; $AS = 3.20$ for human study profile). In contrast, with regard to identity statuses, it was noted that there are significant differences in the average level: adolescents in the profile based-services fall into the commitment identification identity status ($M = 20.46$; $AS = 3.22$), and those from human in career self-doubts identity status ($M = 13.66$; $AS = 4.30$).

Regarding personality traits, it was observed that there are significant differences in neuroticism and conscientiousness. Adolescents of the real study profile ($M = 38.5$) and the human one ($M = 38.9$) have an increased level of neuroticism, which indicates that they are more distrustful and insecure about their professional path compared to adolescents of the profile based-services ($M = 35.91$). Also, the adolescents of the real ($M = 41.31$) and human ($M = 42.55$) study profiles also have a low level of conscientiousness, which means that they fail to organize and plan their career efficiently.

Following the mediation analyzes performed, it was found that goal selection, personality traits - neuroticism and conscientiousness are mediating variables in the relationship between making plans for the future and career commitment identity status. Thus, goal selection, neuroticism, and conscientiousness significantly affect the intensity of the relationship between making plans for the future and adolescents' career commitment ($p < .001$). Therefore, adolescents

with a low level of conscientiousness, a high level of neuroticism and difficulties in goal selection are more prone to difficulties in making plans for the future. In addition to these aspects, there is a significant direct relationship between making plans for the future and career commitment identity status ($c = .54$, $SE = .06$, $t = 8.05$, $p < .001$).

Se remarcă faptul că, autoevaluarea reprezintă o variabilă mediatore în relația dintre statusul identitar identificarea cu angajamentul și statusul identitar angajamentul în carieră, însă rezolvarea de probleme și trăsăturile de personalitate- deschiderea spre experiență și agreabilitate nu au nici un impact în privința medierii relației dintre statusul identitar identificarea cu angajamentul și statusul identitar angajamentul în carieră. Așadar, nivelul de autoevaluare al adolescenților afectează semnificativ ($p < .05$) intensitatea relației dintre statusul identitar identificarea cu angajamentul și statusul identitar angajamentul în carieră ceea ce denotă faptul că, adolescenții care și-au dobândit un nivel crescut de autoevaluare reușesc să se identifice și să-și asume angajamentul luat privind alegerea unei carierei. Pe lângă aceste aspecte, între statusul identitar *identificarea cu angajamentul* și statusul identitar *angajamentul în carieră* există o relație directă semnificativă ($c=.68$, $SE=.05$, $t=11.81$, $p<.001$).

IV.4. Conclusions

Career decisions are among the most important decisions a teenager has to make. For some, making such decisions is not only a complex process, but also a stressful and / or confusing experience. Although some teenagers make these career decisions without any problems, others, on the other hand, face certain difficulties that can delay the initiation of the decision-making process, stop it somewhere in the middle of the process or lead to reducing or postponing optimal decision making (Amir & Gati, 2006).

The aim of this study was to identify the sources of career indecision among 11th and 12th grade adolescents, respectively, depending on gender and chosen study profile. Regarding gender differences, the results showed that there are differences in gathering occupational information about the desired profession, vocational identity status (girls acquired an identity status based on career self-doubts, and boys commitment identification identity status) and personality traits neuroticism and agreeableness, but in terms of self-appraisal, goal selection, making plans for the future, problem solving, conscientiousness, openness and extraversion, no significant gender differences were reported. In addition to this, it was shown that there are differences in the sources of career indecision and in the chosen study profile. Thus, among the adolescents of the

profile based-services, it was observed that the difficulties encountered were those related to self-appraisal, gathering occupational information and goal selection, while the adolescents of the human profile difficulties were those related to making plans for the future process and career self-doubts identity status.

V. STUDY III. THE RELATIONSHIP BETWEEN PERSONALITY FACTORS, VOCATIONAL IDENTITY AND CAREER DECISION-MAKING SELF-EFFICACY

The main objective of this study is to investigate the relationship between personality factors, vocational identity and self-efficacy in the career decision-making process.

The participants of this study were 300 adolescents of the 11th and 12th grades, aged 16-18 ($M_{age} = 17$ years, $AS_{age} = .81$), students of the National College "Dragoș-Vodă", "Marmația" Technological High School and "Regele Ferdinand" Pedagogical College from Sighetu-Marmației, Maramureș County. The adolescents chosen for this study are part of the following profiles: real (specializations: mathematics-computer science and natural sciences), services (specializations: economics, trade, tourism and alimentation) and human (specialization: philology).

The instruments that have been used in this research are::

- *Career Decision- Making Self-Efficacy- Short Form Scale*
- *Vocational Identity Status Assessment, VISA*
- *NEO Five-Factor Inventory*

V.2.5. Procedure

To investigate the existence of an association between personality traits (measured using the NEO-FFI Inventory, Costa & McCrae, 1992), vocational identity (measured with VISA, Porfeli et al., 2011) and career decision-making self-efficacy (measured with CDMSE-SF, Taylor & Betz, 1983), this study will have a factorial design (4x5x5 design).

Statistical analyzes were performed in IBM SPSS Statistics 20 (2011) and AMOS 20 (Arbuckle, 2011).

V.3. Results

Table V.4.: Pearson's correlation coefficients

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Neuroticism	-													
2. Extraversion	.17*	-												
3. Openness	.25*	.44*	-											
4. Agreeableness	.27*	.35*	.36*	-										
5. Conscientiousness	.10	.37*	.35*	.32*	-									
6. Self-appraisal	-.07	.28*	.31*	.24*	.45*	-								
7. Gathering information	-.01	.20*	.27*	.22*	.38*	.63*	-							
8. Goal selection	-.07	.19*	.27*	.27*	.47*	.63*	.63*	-						
9. Making plans for the future	-.19*	.19*	.26*	.17*	.42*	.68*	.64*	.68*	-					
10. Problem solving	-.06	.12**	.24*	.20*	.27*	.59*	.40*	.51*	.55*	-				
11. Career commitment	-.15*	.14**	.17*	.04	.32*	.39*	.35*	.39*	.42*	.17*	-			
12. Commitment identification	-.10	.17*	.24*	.09	.46*	.58*	.54*	.51*	.54*	.36*	.56*	-		
13. Career commitment flexibility	.21*	.03	.09	.03	-.14**	-.03	-.04	-.02	-.09	.14*	-.42*	-.21*	-	
14. Career self-doubts	.35*	.003	.01	.02	-.14**	-.30*	-.19*	-.24*	-.30*	-.17*	-.27*	-.32*	.32*	-

* Correlation is significant at $p < 0.01$

** Correlation is significant at $p < 0.05$

Analyzing the results from the table above, the following aspects are observed: career commitment identity status correlates significantly from a statistical point of view with personality traits - neuroticism ($r_{(298)} = -.15$), extraversion ($r_{(298)} = .14$), openness ($r_{(298)} = .17$) and conscientiousness ($r_{(298)} = .32$), self-appraisal ($r_{(298)} = .39$), gathering information about self and occupations ($r_{(298)} = .35$), goal selection ($r_{(298)} = .39$), making plans for the future ($r_{(298)} = .42$) and problem solving ($r_{(298)} = .17$). Also, commitment identification identity status correlates statistically significantly with personality traits- extraversion ($r_{(298)} = .17$), openness ($r_{(298)} = .27$), conscientiousness ($r_{(298)} = .46$), self-appraisal ($r_{(298)} = .58$), obtaining information about self and occupations ($r_{(298)} = .54$), goal selection ($r_{(298)} = .51$), making plans for the future ($r_{(298)} = .54$) and problem solving ($r_{(298)} = .36$). In addition, career commitment flexibility identity status correlates statistically significantly with the following personality traits: neuroticism ($r_{(298)} = .21$) and conscientiousness ($r_{(298)} = -.14$), and related to self-efficacy regarding the process of making career decisions only with problem solving subscale ($r_{(298)} = .14$). In addition to these aspects, career self-doubts identity status correlates statistically significantly with personality traits neuroticism ($r_{(298)} = .35$) and conscientiousness ($r_{(298)} = -.14$), and with the career decision-

making self-efficacy process: self-appraisal subscales ($r_{(298)} = -.30$), obtaining information about self and occupations ($r_{(298)} = -.19$), goal selection ($r_{(298)} = -.24$), making plans for the future ($r_{(298)} = -.30$) and problem solving ($r_{(298)} = -.17$).

Regarding the career decision-making self-efficacy process, it was found that the self-appraisal subscale correlates statistically significantly positive with personality traits-extraversion ($r_{(298)} = .28$), openness ($r_{(298)} = .31$), agreeableness ($r_{(298)} = .24$) and conscientiousness ($r_{(298)} = .45$). The subscale gathering information (related to self and about occupations) correlates statistically significant positive with personality traits- extraversion ($r_{(298)} = .20$), openness ($r_{(298)} = .27$), agreeableness ($r_{(298)} = .22$), conscientiousness ($r_{(298)} = .38$) and self-appraisal subscale ($r_{(298)} = .63$). Goal selection subscale correlates statistically significantly positive with extraversion personality traits ($r_{(298)} = .19$), openness ($r_{(298)} = .27$), agreeableness ($r_{(298)} = .27$), conscientiousness ($r_{(298)} = .63$). Making plans for the future subscale positively correlates statistically significantly with extraversion personality traits ($r_{(298)} = .19$), openness ($r_{(298)} = .26$), agreeableness ($r_{(298)} = .17$), conscientiousness ($r_{(298)} = .42$), the self-appraisal subscale ($r_{(298)} = .68$), the gathering occupational information subscale ($r_{(298)} = .64$) and the goal selection subscale ($r_{(298)} = .68$), but between career planning and neuroticism demonstrated the existence of a statistically significant negative correlation obtaining a coefficient ($r_{(298)} = -.19$). Problem solving subscale correlates statistically significantly positive with extraversion personality traits ($r_{(298)} = .12$), openness ($r_{(298)} = .24$), agreeableness ($r_{(298)} = .20$), conscientiousness ($r_{(298)} = .27$), self-appraisal subscale ($r_{(298)} = .59$), gathering occupational information subscale ($r_{(298)} = .40$), goal selection subscale ($r_{(298)} = .51$) and career planning subscale ($r_{(298)} = .55$).

V.4. Conclusions

Self-efficacy is the belief of individuals about their own abilities needed to achieve goals and accomplish tasks. The entry of the adolescent into the professional life, which is equivalent to the transition from adolescence to adulthood, entails a series of changes. One of the most important changes is the change of the adult role in the social relations system. If in adolescence the social life with its entire issue was built through parents and teachers, with the transition to adulthood, the adolescent becomes a component and active element of it. The young man is responsible not only for his own actions, but also for those of the man next to him (whether it is a child, a wife, a colleague or a co-worker). Therefore, "from an" investigator "of social life, as manifested in adolescence, the young person becomes a direct participant in it" (Davidescu, 2019, p.140)

The present research aimed to investigate some associations between personality traits, vocational identity and self-efficacy regarding the career decision-making process. The results highlighted the existence of correlations between the measured variables. Thus, career commitment identity status correlates with the personality traits- neuroticism, extraversion, openness and conscientiousness, and regarding the career decision-making self-efficacy process correlates with the process of self-appraisal, gathering information about oneself and professions, career planning and problem solving. Commitment identification identity status correlates with personality traits-extraversion, openness and conscientiousness, and from the perspective of career decision-making self-efficacy process correlates with the process of self-appraisal, gathering information about oneself and professions, goals selection, problem solving and career planning. Career commitment flexibility identity status correlates with personality traits neuroticism and conscientiousness, and from the perspective of career decision-making self-efficacy process correlates with the problem-solving process. The career self-doubts identity status correlates positively with personality trait neuroticism and negatively with conscientiousness, self-appraisal, gathering information about oneself and professions, goals selection, career planning and problem solving.

In addition to these aspects, it was investigated what are the possible predictors in acquiring a certain vocational identity status. As such, statistically significant positive predictors for acquiring career commitment identity status are conscientiousness personality traits, self-appraisal, goal selection and career planning, and statistically significant negative predictors are, neuroticism personality traits, and problem-solving, while predictors statistically significant positives for acquiring commitment identification identity status are conscientiousness personality trait, self-appraisal process, gathering information about oneself and professions, goal selection and career planning and the statistically significant negative predictor is personality trait agreeableness. Regarding career commitment flexibility identity status statistically significant positive predictors are neuroticism personality trait and problem solving and statistically significant negative predictors are conscientiousness personality trait and career planning, while while the only statistically significant positive predictor that influences the acquisition of career self-doubt identity status is neuroticism personality trait.

VI. STUDY IV: TESTING THE EFFICIENCY OF A CAREER COUNSELING PROGRAM FOR THE ADOLESCENTS VOCATIONAL IDENTITY FORMATION

VI.2. Research methodology

VI.2.1. The aim and the objectives of the study

The purpose of this study was to develop, implement and test the efficiency of a career counseling program on the vocational identity development of 11th and 12th grade adolescents, focusing on the following objectives:

- ✓ Elaboration and implementation of a career counseling program regarding the vocational identity development of the adolescents participating in the study starting from the analysis of needs identified in the ascertaining stage;
- ✓ Analysis of the level of efficiency of the career development intervention program implemented in order to increase adolescents' confidence in their own ability to make favorable decisions for the future;
- ✓ Impact verification that the intervention program had on the acquisition of a favorable vocational identity for the career choice process.

VI.2.3. Participants

For this study, was collected a group of 80 adolescents from the 11th and 12th grade, students of the “Dragoș-Vodă” National College and the “Marmația” Technological High School from Sighetu-Marmației, Maramureș County. The participants for this study were selected following the answers provided by them to the questionnaires received in the ascertaining stage.

VI.2.5. Research stages

In order to observe whether the proposed career counseling program will have a significant effect on the adolescents' vocational identity development, this study had an experimental and intragroup factorial design.

- ✓ *Pre-test phase*: following the rating of the answers given by the adolescents to the questionnaires offered, a group of participants was selected for the career counseling program..
- ✓ *Experimental phase*: starting from the needs identified following the rating of the adolescents' answers in the ascertaining stage, a career counseling program was elaborated and implemented meant to develop their vocational identity necessary for the process of choosing a profession.

✓ *Intermediate phase:* In order to notice if the proposed counseling program has an effect on the adolescents vocational identity development, after carrying out the first four counseling activities, we reapplied the questionnaire that measures vocational identity.

✓ *Post-test phase:* consisted in the application of the questionnaire measuring vocational identity at the end of the entire career counseling program to establish the improvements in vocational identity status and the effectiveness of the proposed career counseling program.

VI.3. Results

In order to verify the existence of the efficiency of the proposed career counseling program regarding the adolescents vocational identity development was calculated the Repeated Measures ANOVA.

Table VI.3. Paired comparison between experimental conditions for the variable career commitment

(I) career commitment	(J) career commitment	Mean difference (I-J)	Standard error	p ^b	95% IC ^b	F	r
<i>Etapa pre-test</i>	<i>Etapa intermediară</i>	4,63*	,17	,00	[-5,07; -4,20]	691,75	.94
	<i>Etapa post-test</i>	8,88*	,24	,00	[-9,48; -8,29]	913,24	.96

* The difference is significant at a $p < .05$

^b Bonferroni adjustment for multiple comparisons

Analyzing the results from table VI.3., it is observed that there are significant differences between the pre-test condition and the intermediate one [Bonferoni $t = 4.63 / 0.17 = 27.23$, $p = .00$], but also between the pre-test condition and post-test [Bonferoni $t = 8.88 / 0.24 = 37$, $p = .00$]. Knowing from the post hoc tests that there are significant differences between the experimental conditions, the effect size was further calculated. Thus, there is a significant development of the career commitment vocational identity status after the first career counseling sessions [F (1,79) = 691.75, $p = .00$, $r = .94$], and after the entire career counseling program [F (1,79) = 913.24, $p = .00$, $r = .96$]; the effect being very strong.

Tabel VI.5. Paired comparison between experimental conditions for the variable career self-doubt

(I) career self-doubt	(J) career self-doubt	Mean difference (I-J)	Standard error	p ^b	95% IC ^b	F	r
<i>Etapa pre-test</i>	<i>Etapa intermediară</i>	6,60*	,17	,00	[6,16; 7,03]	1382,02	.97
	<i>Etapa post-test</i>	12,47*	,28	,00	[11,77; 13,17]	755,46	.95

* The difference is significant at a $p < .05$

^b Bonferroni adjustment for multiple comparisons

Also, regarding the career self-doubts identity status were noticed significant differences between the experimental conditions. Following the calculation of the Bonferoni post hoc test, it was found that the career self-doubts identity status has changed, the level starting to decrease both after the first career counseling sessions [Bonferoni $t=6.60/0.17=38.82$, $p=.00$], as well as throughout the counseling program [Bonferoni $t=12.47/0.28=44.53$, $p=.00$]. Moreover, in order to assess the impact of the proposed counseling program on reducing the level of this identity status, the effect size was calculated. The results showed that there is a strong effect [$F_{(1,79)}=1382.02$, $p=.00$, $r=.97$ pre-test phase- intermediate phase condition; $F_{(1,79)}=755.46$, $p=.00$, $r=.95$ pre-test-post-test condition]. In other words, once the adolescents developed their assumed vocational identity, their level of independence, flexibility and motivation increased in the context of making decisions about choosing a career, respectively in order to achieve an efficient management of their career.

VI.4. Conclusions

Career counseling is the process by which the adolescent is helped to know and understand himself and the world of work in order to make rational decisions about career, education and life. Thus, career counseling is "a set of educational and training activities designed to prepare the person to choose their studies and professions, but especially the path to be taken to reach a level / stage of personal fulfillment and social as high as possible" (Stevenson, Miclea & Opre, 2007, pag.11).

Students career planning being a continuous process of adjusting career goals to personal characteristics and educational and occupational offer is materialized in: "Self-knowledge:

exploring and structuring information about oneself (interests, values, skills, personality traits); Educational and occupational exploration: collecting information about educational and professional paths; Career decision: selection of an educational / professional option from the available options at a given time; Personal promotion: systematization and presentation of information about one's own educational and professional skills, interests and experiences in order to achieve career goals” (Lemeni & Miclea, 2010, pag. 143).

This study aimed to develop, implement and test a career counseling program designed to develop 11th and 12th grade adolescents, an assumed vocational identity in order to make rational choices related to the choice of their occupational route. The activities of the proposed career counseling program focused on the following components: developing self-knowledge, knowing one's own values, acquiring relevant information about professions, developing a career plan and developing career management skills (personal promotion).

Testing the intervention program "Make yourself a priority " on a group of 80 adolescents, I can say that this program has demonstrated its effectiveness in forming favorable vocational identity status for adolescents in the final years of high school. Thus, the results obtained indicated that, in terms of activities, there were improvements in the intermediate stage and until the end of the entire counseling program. After the calculation of the effect size, the following were demonstrated: regarding the career commitment vocational identity status, after the first career counseling sessions obtained an $r = .94$ and, after the entire career counseling program, $r = .96$; for commitment identification vocational identity status was obtained a $r = .87$ in the intermediate stage and after the entire career counseling program a $r = .95$; the effect being a strong one and lastly regarding career self-doubt vocational identity status was obtained an $r = .97$ in the pre-test-intermediate stage condition and an $r = .95$ in the pre-test-post-test condition, which means that the effect of the career counseling program has been a strong one.

VII. CONCLUSIONS

The transition from student status to active membership in the labor market has the potential to cause great career indecision among adolescents, who have to narrow down the multitude of options to choose a field that suits them better with personality traits, skills, behavior, aspirations for the future.

As teachers, school counselors, parents, managers, many of us take on, among other things, the responsibility to shape their vocational identity and develop an autonomous self, to encourage them to explore their interests and vocational skills.

Like any research project, this one contains certain limits of the research because the studies carried out and described in this thesis have certain specific limits. Firstly, in the first study, a first limitation was the small sample size. As this study was conducted on a small number of participants ($N = 30$) it is not possible to talk about a validation on the Romanian population of the scale. A study with a small sample may not have the statistical power to expose a small effect size that can lead to type II error (Jones, Carley & Harrison, 2003).

The second limit would be related to the way scales are administered; the use of self-assessment scales could be influenced by the distortion of social desirability. Tourangeau and Yan (2007) based on a review of the literature concluded that the bias of the desirable social response is often motivated by the desire to avoid shame and the repercussions of revealing personal information related to impression management.

The last limitation of this study would be the lack of investigation of a metric invariance (MI), because certain items of the questionnaire have changed over time. An example would be the first item of the Career decision-making self-efficacy scale - short form (eg "Finding information at the library or bookstores about the occupations that interest you?"). Nowadays, teenagers do not have to go to the library, as most now use the internet to search for information about the occupations they are interested in.

Secondly, the limits of the second study were: the selection of participants, having as participants only from a single geographical area, respectively a small volume of participants ($N=300$), in these conditions we cannot extrapolate the results obtained) and the lack of investigation of endogenous variables such as optimism or intrinsic motivation in the career decision-making process. Starting from these limits, I thought of the following new future research directions: a first future research direction would be to continue the study by inserting

the endogenous variable - coping strategies - as a predictor variable for career decision-making self-efficacy process. The second future research direction would be to investigate the impact of family interaction on the adolescents' vocational identity development. The last future research direction would be to conduct a mediation analysis to test the relationship between the level of attachment - parenting style - career decision-making self-efficacy process. Cenkseven-Önden et al. (2010) demonstrated that parenting style has an influence on the lack of information about oneself, related to occupations and general career indecision.

Thirdly, the third study had the limit the lack of investigation of endogenous variables such as external or internal conflicts that adolescents face in the career decision-making process. A future research direction would be to investigate a mediation analysis between vocational identity - emotional intelligence - career decision-making self-efficacy process.

Finally, regarding the last study, the limit was the absence of a control group, respectively the lack of a secondary evaluator. I think that the inclusion of a control group in a research allows a meaningful comparison of the result leading to an increase in the magnitude actually studied. The second limit was the lack of a secondary evaluator; as the evaluations in the three experimental stages (pre-test phase, intermediate phase and post-test phase) were carried out only by me, another expert such as a school counselor would have been needed for a better reliability of the study.

A future research direction would be to develop a workshop for parents implementing the TRICK method (Wojcicki, 2019). Another future research direction would be to investigate the impact of the motivational interview.

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