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THE EFFICIENCY OF A TRAINING PROGRAM ON REDUCING CAREER DECISION-MAKING DIFFICULTIES

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Abstract: *This study's objective is to analyze the effect of career development training on career decision-making difficulties. 138 participants (high-school students, XII grade) were included, thus: 63 within the control group, 51 within the experimental group, and 24 within the placebo group. The training took place during a 10-week period, and it intended to increase the decision-making capacity regarding future career. The level of difficulties was assessed with the CDDQ – Career Decision-Making Difficulties Questionnaire (Gati & Osipow, 2000, 2002) – which was validated on Romanian population. Results show there are significant differences in posttest between the three samples, as follows: for global difficulties regarding career decision ($f=.405$), for difficulties caused by the lack of information ($f=.405$), and for difficulties caused by inconsistent information ($f=.405$). As the results have shown, the global level of difficulties regarding career decision-making had dropped significantly from pretest to posttest within the experimental group, and it maintained constant in follow-up. The results obtained within this study point out the importance of modular interventions in career development on high-school students. It has been ascertained that interventions of this kind are likely to have an indirect impact on reducing perceived difficulties related to the process of future career decision.*

Keywords: *career decision-making difficulties, training efficiency, career development*

1. INTRODUCTION

Career counseling is a lifelong, complex, and sinuous process. Career counseling activities, in its direct, organized and planned form, are implemented in schools, centers, private practices or within public institutions that work with adolescents looking for a career, with fresh graduates who are looking for a job, with individuals wanting professional reconversion, with unemployed individuals who want to re-enter the labor market, or with retired individuals who wish to remain professionally active. Among reform measures implemented in Romania in the past few years, career counseling and orientation was constantly taken into consideration by educational policies, and was introduced in the

national education plan as a distinct curricular area, starting with the school year 1998-1999. The information is based on the M.E.N. Law no. 3207 from 02.03.1999 regarding the implementation of the new educational plan for the primary, secondary, and high-school cycles, starting with the school year 1999-2000. There is a series of legal documents that confirm the preoccupation for implementing in the educational area of objectives related to school guidance for children and young adults, before 1998.

The necessity for career guidance is due to the following factors:

- the increased complexity of society's occupational and organizational structure, which makes it more difficult to gather,

assimilate, and organize information necessary for career decision-making;

- rapid technological development, which requires adaptability, flexibility, and open-mindedness;
- the nation-wide increased interest in the improvement and using of every individual's potential;
- the keen seeking for values which give life a meaning;
- the need for special training in order to obtain a better job;
- the disillusion lived by some young individuals with educational difficulties, and by adults forced to adapt to the new conditions dictated by a changing society (Jigau, 2001)

2. Career decision-making difficulties

2.1 The interest in the research of career decision-making difficulties issue.

The large number of individuals confronted with a variety of difficulties in their struggle to choose a profession, emphasizes the utility of studying the decision and the factors of indecision regarding the choice of future profession or career. The words "career indecision" are used to express the problems that may occur during career decision-making process.

The decision regarding future career is a complex process. Some theorists include it in the "situations of crucial importance" category. It represents the process of choosing one alternative from the multitude of alternatives available at a given moment.

Gati and his colleagues (1996) have developed and studied empirically a theory-based taxonomy of the career decision-making difficulties. This category of difficulties has been defined as a set of deviations, deflections from what could be called "the ideal career decision", that a person who is aware of the necessity of a decision on this matter, has the willingness to proceed with it, and is capable of choosing the right alternative (based on an adequate process, compatible with individual's interests and resources) could make. Any variation from this ideal model is seen as a potential difficulty that could affect the

decision process regarding future career in one or two ways: the individual backs off from making any decision at the given moment, or he/she fails to make the optimum decision.

The classification includes three main categories, each category consisting of other difficulties, and thus, totalizing 10 specific categories (Gati and colab., 1996). The first main category, *difficulties regarding the lack of readiness*, includes three specific categories of difficulties that may occur before the actual decision process: (a) the lack of motivation for career decision, (b) general indecision that affects all kinds of decisions, and (c) dysfunctional beliefs, including irrational expectancies regarding career decision-making process.

The other two main categories of difficulties, *lack of information* and *inconsistent information*, include categories of difficulties that may occur along the actual decision process. The *lack of information* includes four specific categories: (a) the absence of knowledge about the steps involved in the process, (b) the lack of information about oneself, (c) the lack of information regarding possible alternatives, and (d) the absence of knowledge about additional sources of information. The third main category, *inconsistent information*, includes three specific categories of difficulties concerning the exploitation of information: (a) uncertain information (difficulties involving uncertain or contradictory information), (b) internal conflicts (struggles due to contradictory preferences or to the need for compromise), and (c) external conflicts (concerning the influence of significant others).

Regarding the differences due to participants' gender (Gati and Saka, 2001, in Tien, 2005), they indicated that high-school boys have greater difficulties than girls on *external conflicts* and *dysfunctional beliefs*. Tien (2005), obtained, on a Taiwanese sample (188 boys and 329 girls), significant differences between boys and girls for *lack of motivation* ($F(10, 468)=5.83, p<.05$, within the *difficulties caused by lack of readiness* subscale), but he didn't find any significant differences for the other subscales.



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Singaravelu and his colleagues (2005) have also shown that there are no significant differences between girls and boys regarding the level of career difficulties. Literature (Leong, 1995 in Singaravelu and collab., 2005) indicates that traditional female role characteristics are constantly changing, meaning that graduating from school becomes important not only for males, but for females, too.

Creed, Patton, and Prideaux (2006) haven't obtained statistically significant differences by gender for career indecision, either. Within another study, Lapan, R. T., Hinkelma, J. M., Adams, A., Turner, S. (1999) have examined the latent factors that narrow down the career options for adolescents with rural provenience. They have shown that parental support regarding the choice of occupations within the realistic and investigative areas is perceived differently by boys and girls. Tien (2005) has obtained, in his study, statistically significant differences by factor "level of education" (or the decision stage), for four out of ten subscales within the original version of Career Decision-making Difficulties Questionnaire (CDDQ): dysfunctional thoughts, internal conflicts, external conflicts, and ways of gathering additional information. These results indicate that career decision-making difficulties caused by dysfunctional thoughts, conflicting conditions, and means of gathering information are several concerns for individuals both of different age groups or on different stages of career decision-making process. Kleiman, T., Gati, I., Peterson, G., Sampson, J., Reardon, R., Lenz, J. (2004) are citing Gati's, Saka's and Krausz's (2001) study by which individuals on early stages show higher levels of difficulties regarding future career, compared to individuals on the final stages of decision process. Analogue,

those with higher level of decision difficulties regarding future career also show a higher degree of dysfunctional thinking related to choosing a career.

Tinsley, H. E. A., Tinsley, D. J., Rushing, J. (2002) state, as an outcome of the analysis of results from studies conducted by Fretz, 1981; Kivlighan, 1990; Lunneborg, 1983; Oliver & Spokane, 1988; Phillips, 1992; Rounds & Tinsley, 1984; Spokane & Oliver, 1983; Tinsley, Benton, & Rollins, 1984; Tinsley, Tokar, & Helwig, 1994, that a series of research studies backs up the idea that both individual and group career counseling are efficient. Oliver and Spokane (1988, in Tinsley, H. E. A., Tinsley, D. J., Rushing, J. 2002) have performed a meta-analysis regarding the efficiency of career counseling, and obtained an effect size of 2.05 for group career counseling, of 0.76 for test interpretations for groups of subjects, of 0.75 for career workshops, and of 0.74 for the individual career counseling.

Some theorists have postulated the idea that individuals with different decision styles (or different psychological typology) would respond differently to career counseling interventions (Harren, 1979; Johnson, 1978; Myers & McCaulley, 1985, in Tinsley, H. E. A., Tinsley, D. J., Rushing, J. 2002), but no researcher has yet approached this matter.

3. Method

3.1 Participants. In the study were included 138 participants, high-school senior year, age 18 to 19 years old, distributed within three groups: the control group, consisting of 63 students, the experimental group, with 51 students, and the placebo group, of 24 students. The students came from three different high-school from Bihor county, and

they took part in the study on a voluntary basis.

3.2 Instruments. *Career Decision-Making Difficulties Questionnaire* is a relatively new instrument, and it is based on the taxonomy of career decision-making difficulties.

It consists of 34 items, plus 3 additional items; the first additional item requires the participant to specify if he/she has already made a decision regarding future career, the second additional item regards participant's certainty that he/she has made the right decision (these two additional items are presented before the 34 items of the actual questionnaire), and the third additional item, which is presented at the end of the actual questionnaire, assesses participant's perceived level of difficulties regarding future career decision process.

Each of the 34 items refers to a certain difficulty regarding career decision-making process (ex. *I find it hard to make a decision regarding my future career, because I'm not aware of the steps involved*); the answer is given on a 9 point Likert-type scale, going from 1 (not at all like me) to 9 (very much like me).

The scale was adapted on Romanian population in a research study conducted by Birle (PhD thesis, in press).

3.3. Procedure. The instruments were applied in the classroom, anonymously, and based on an informed consent. During a period of 10 weeks, the students took part in a career development training program that aimed areas like self-evaluation, occupational information, career goals, and problem planning and solving, areas chosen based on career maturity theory and career decision-making self-efficacy theory (Betz and Taylor, 2001). Two activities were allocated to each topic. The placebo group also participated on a 10-week training program, on *Conflicts and communication*. Same questionnaire was applied in posttest and follow-up, in order to verify intervention's efficiency for the three groups within the study.

4. Results and discussion

The scoring for CDDQ items was made according to the results from the validation on Romanian population study, being preferred, as a result of CFA, the three subscales version, thus: difficulties caused by lack of information subscale, difficulties caused by inconsistent information subscale, and difficulties caused by lack of readiness subscale.

In pretest, all three groups presented homogeneous scores for all CDDQ subscales and for the global score, when compared with one-way ANOVA.

In posttest, the following results were obtained:

Table 1. Means and standard deviations for CDDQ scores in posttest

Scale	Group	N	Mean	S.D.
CDDQ (global score)	control	63	137.42	43.62
	experimental	51	102.27	31.93
	placebo	24	135.04	47.74
	Total	138	124.02	43.54
CDDQ inconsistent information	control	63	46.41	17.74
	experimental	51	31.86	14.01
	placebo	24	47.25	21.33
	Total	138	41.18	18.49
CDDQ lack of information	control	63	61.30	24.22
	experimental	51	40.90	16.45
	placebo	24	56.45	28.97
	Total	138	52.92	24.36
CDDQ lack of readiness	control	63	23.47	8.43
	experimental	51	22.47	8.21
	placebo	24	23.12	8.37
	Total	138	23.04	8.29

The one-way analysis of variance indicates significant differences between samples in posttest, for *global difficulties regarding career decision-making*, for *difficulties caused by lack of information*, and for *difficulties caused by inconsistent information*. The three statistical analyses show medium effect sizes (for global score, $f=.405$, for inconsistent information and for lack of information $f=.403$). Although there are no significant differences between the three samples for *difficulties caused by lack of readiness* in posttest, for the experimental group, the mean has dropped with approximately 3 point from pretest.



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Games-Howell post hoc test indicates significantly more difficulties for the control group compared to the experimental group for CDDQ global score ($d=0.944$), and the placebo group has significantly more difficulties in posttest than the experimental group ($d=0.545$); Hochberg GT2 post hoc test indicates statistically significant differences between the control and experimental groups, for *inconsistent information* ($d=0.928$). Likewise, the placebo group has significantly more difficulties caused by *inconsistent information* ($d=0.577$), compared to the experimental group. The values of Hochberg GT2 post hoc test for *difficulties caused by lack of information* faced by subjects in posttest, has associated a significance value of $p=0.001$ and an effect size $d=1.033$, for the comparison of experimental and control groups. The differences between the three samples remain strongly significant in follow-up, with medium effect sizes for CDDQ global score ($f=.468$), for difficulties caused by inconsistent information ($f=.426$), and for difficulties caused by lack of information ($f=.486$). There are no statistically significant differences for difficulties caused by lack of readiness.

On ANOVA repeated measures, intra-group comparisons, important size effects were obtained for the experimental group, thus: for CDDQ global score part $\eta^2=.670$, for difficulties caused by inconsistent information part $\eta^2=.637$, for difficulties caused by lack of information part $\eta^2=.516$, and for difficulties caused by lack of readiness part $\eta^2=.401$.

As the results indicate, the global level of career decision-making difficulties has reduced significantly from pretest to posttest within the experimental group, and it maintained constant in follow up. The same pattern is observed for CDDQ subscales, meaning for difficulties caused by lack of

readiness, by lack of information, or by inconsistent information.

The difficulties caused by lack of readiness were significantly fewer within the experimental group, and they kept constant in follow-up. The most important effect size (part $\eta^2=.704$) has been found for the first contrast, between pretest and posttest to be exact, for difficulties caused by inconsistent information. The difficulties caused by lack of information have reduced significantly within the experimental group, as a result of the intervention, and they kept at the same level in follow-up. Regarding the placebo and the control groups, there are no significant changes in the level of difficulties caused by lack of information.

5. CONCLUSIONS

This study puts forward an intervention model that hopes to increase senior year high-school students' confidence in their capacity of making the right decisions regarding their future profession, and to reduce the level of difficulties associated to the same decision process, as well.

Results sustain the efficiency of this training program, on the condition of a thorough experimental control – experimental group, placebo group, and control group, with three evaluation moments – pretesting, post-testing, and follow-up; because we wanted to generalize the efficiency of the training, we used classes of students with multiple educational profiles. Living in the century of speed and information, we consider the transposing of the training in a computerized, more interactive version, as future research heading, to be practical and of use to students, teachers, school counselors, and parents.

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