Evaluation of a Career Counselling Program Focused on Greek Elementary School Children's Career Interests

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Abstract

Although childhood is the most significant period in one's career development process, little research attention has been paid to the evaluation of career counselling intervention programs in elementary-aged children. An intervention study was carried out in order to evaluate a career counselling program implemented in one Greek elementary school which focused on the enrichment of the children's career interests. The research methodology used was the quasi experimental research design. Children (N = 84) aged 8-11 years were distributed in experimental and control groups. The impact of the intervention focused on the enrichment of their career interests, which was assessed via semi-structured interviews and use of drawings. The results showed a statistical significant difference between groups concerning children's career interests after intervention, while the analysis of drawings revealed more differences in self-confidence, self- esteem and extraversion in favour of the children that participated in the experimental group. Gender and age differences were also explored and revealed. The results are discussed in relation to various aspects of children's career development, as well as to the significance of career counselling intervention programs.

Keywords: career counselling intervention program, elementary school, career interests, gender, age

Introduction

Career development is a process that starts early in one's life. Childhood should be considered as the most active period of that process (Hartung, Porfeli, & Vondracek, 2005). Theory and research literature so far, views the child's vocational development as a process with various aspects, such as career exploration, awareness, expectations and aspirations, maturity and interests (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Gottfredson, 1996; Hartung, Porfeli, & Vondracek, 2005; Holland, 1997; Roe, 1957; Super, 1953). Children learn about work at the same period they start to establish a sense of self and the combination of these two parameters, shape the development of a vocational identity and self-concept (Porfeli, Hartung, & Vondracek, 2008; Schmitt-Rodermund & Vondracek, 1999), values (Porfeli, 2007), and interests (Holland, 1997). The aforementioned process differs according to age (Dorr & Lesser, 1980; Howard & Walsh, 2010, 2011; Walls, 2000) and gender (Helwig, 1998; Stockard & McGee, 1990). Gottfredson (2002), has supported that there is a four-stage process, which includes different developmental achievements. In brief, children of 3-5 years start to understand what it means to be an adult, children of 6-8 years become oriented to sex roles and their thinking leads to gendered career interests, while children of 9-13 years are more oriented to social valuation, which leads to a preference of the level of work.

After exiting elementary school, the young adolescents get more oriented to the internal self and utilize the knowledge of self to select from the careers that would interest them.

Research (Van der Wilk & Oppenheimer, 1991) in children's development of career interests, so far supports Gottfredson's theory, since the age of 8 to 11 years seems to be a critical period for children's awareness about interests.

All the aforementioned aspects, processes and phases of career development in childhood, are not only considered to be important in educational and career choices made by one later in his/her life (Porfeli et al., 2008), but also connected to school success, as well as to drop-out rates in high school years (Akos, Niles, Miller, & Erford, 2011; Kao & Tienda, 1998; Turner & Lapan, 2013). Therefore, the school career counselling interventions would be more beneficial for society, if they were carried out during childhood (Schultheiss, 2008), when the person develops their career interests and bounds them with the emerging identity, and surely before the conceptions of gender in the world of work become definite (Liben & Bigler, 2002).

Despite the importance of the processes that take place throughout childhood, limited intervention practices exist concerning career development during the elementary years and especially those that connect school learning with what happens in work life (Rohlfing, Nota, Ferrari, Soresi, & Tracey, 2012). Most of the career practices concern visits to various vocational places, in order for the children to learn about the world of employment. In the USA, very few elementary schools provide developmental career guidance programs to students in accordance to the outlines set by the national unions and institutions (Kobylarz, Crow, & Ettinger, 2004). Most of these efforts are constrained by the lack of basic research of how children learn about the world of employment (Porfeli et al., 2008). Moreover, research that provides practitioners with information about the efficiency of career intervention practices remains scarce. An Australian study (Gillies, McMahon, & Carroll, 1998) showed that the career education program implemented in one school, had a positive effect on the children's job knowledge but failed to make any changes on the children's gender stereotypical perceptions of different jobs. Another study also revealed similar results (Killeen, Edwards, Barnes, & Watts, 1999).

Considering the following numerous facts that: first, little yet is known about children's career development, second, there are contradictory findings concerning the differential role of age and gender in children's career development (Helwig, 1998; Primé, Nota, Ferrari, et al., 2010; Rohlfing et al., 2012) concerning whether the children's career knowledge differ across gender and age, and third, career counselling practice has not been, so far, officially applied to Greek elementary schools, we carried out an intervention study, aiming to evaluate a career counselling intervention program in the domain of 8 and 11 years old, Greek elementary students' career interests. The program attempted to enhance children's knowledge about certain jobs and their qualifications, and therefore enrich their career interests. Although it is widely accepted that the vocational self-concept occurs through interests among one's other attributes (Super, 1963) and that the establishment of interests occurs in childhood (Holland, 1997), very little empirical attention has been paid to them (Hartung et al., 2005).

The study examined the following questions:

- Are there any effects of the career counselling program on children's career interests? More specifically, are there any differences between the experimental and control groups, in relation to their career interests prior and after the intervention?

- Are there any gender differences in children's career interests?

- Are there any gender differences in children's career interests post intervention?

- Are there any differences in children's career interests across age?

- Are there any differences in children's career interest across age post intervention?

Method

The research was carried out by adopting the quasi-experimental methodology, based both on the experimental research design and the interpretative phenomenological analysis (IPA), a qualitative research approach that guides research design, data collection and analysis (Smith, Flowers, & Larkin, 2009). IPA concerns one's lived experience and refers to the everyday flow of unconscious experience, or the experience that has had a major significance to the participant. It can provide a relatively holistic understanding of participants' experiences and perceptions. IPA is also idiographic, in that it aims to gain an in-depth understanding of participants' experiences. Research based on IPA, is characterized by small, homogeneous samples that enable an in-depth understanding, in the present study, of how Greek elementary children experience their vocational interests.

Participants

The research took place in an elementary school located in the western part of Athens. It is a crowded urban area with low socio- economic status. The sample of the study consisted of 84 children (31 girls and 51 boys) aged between 8 years (*N* = 40) and 11 years (*N* = 44). Each age group consisted of two different groups: the experimental and the control one, separated in different classrooms. The experimental and the control groups, for each age, were randomly selected. The experimental group consisted of 19 children aged 8 years (8 girls and 11 boys), while the control group for the same age consisted of 21 children (10 girls and 11 boys). The experimental group consisted of 24 children aged 11 years (9 girls and 15 boys), while the control group for the same age consisted of 20 children (9 girls and 11 boys).

Intervention

The model, on which the intervention was based, was Holland's (1997) Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC) model, which for decades has been the reigning model of vocational personality types and work environment. According to this model, career choice, and more precisely career interests are an expression of personality and most individuals can be categorized in one of the above-mentioned personality types. Rigorous definitions of the principal attitudes of each personality type have been developed over the last 40 years by Holland (1966, 1973, 1985, 1997).

The purpose of the intervention was to enhance the children's career knowledge in regard to the characteristics of the jobs discussed, in order to enrich their career interests. The intervention consisted of six separate sessions, twice a week, of 45 minutes each and it was implemented during the curriculum course. Its principles were consistent with relevant research (Harkins, 2000; Johnson, 2000), which has reported that effective career educational programs are the ones that connect learning with work. The intervention was delivered to the experimental groups by the regular class teacher, who was educated and supervised by the first author, throughout the implementation of the intervention. The intervention sessions were based on the *Oregon Career Aware* handouts, developed by Oregon's Partnership for Occupational and Career Information (2012) and was based on Holland's RIASEC personality types. They were translated and adapted in order to match the Greek vocational reality. For younger

children, the language used was uncomplicated and easy, so that they could understand and fully participate in the program. Each session was named after the career types of personality. In every lesson, a handout was given to each one of the students. Every one of the personality type handouts consisted of four occupations that were typical of the personality type (e.g. the *artistic* type included the jobs of graphic designer, painter, interior designer and writer; the *realistic* included desktop publisher, electrical engineer, veterinarian and roofer; the *investigative* included dietician, plant scientist, computer analyst and mapping technician; the *social* included fitness trainer, child care worker, medical assistant and school counselor; the *enterprising* included lawyer, travel agent, loan officer and telemarketer and the *conventional* included accountant, archeologist, receptionist, and teller). There was a brief job description and the relevant qualifications needed, accompanied by a small activity such as role-playing (e.g. "Pretend you are an interior designer. What changes would you make to your classroom?", "Draw a sketch of how you would like it to look"). The teacher and children read the texts and enrolled into the activities included. At the end of each lesson, there was a group game of pantomime, during which everyone tried to guess the job that a student attempted to demonstrate.

Research Instruments

The findings were collected, with the help of a semi-structured interview, as well as children's drawings of "someone who does a job".

Drawing (Draw a Person Who Does a Job)

The method used, applied the drawings as assessment instruments for the purposes of the present study. It was based on the literature related to the assessment of drawings, entitled "Draw a person" (Cox, 2005; Kounenou, 2007; Kroti & Mani, 2003; Machover, 1949; Malchiodi, 1998). According to the literature, drawings permit children to express inner emotions, thoughts, and representations of self, providing useful information for their self-concept and unconscious world. As Malchiodi (1998) has stated, the figure is the person him/herself and the paper is the person's environment. Drawing, as an assessment instrument, provides information about the unconscious inner world of the children, more than any other verbal activity (Diem-Wille, 2001) and is very familiar to young children. Besides, drawings can be used as a useful "ice-breaking" activity (Thomas & Jolley, 1998). According to the aforementioned relative literature, defense mechanisms become less activated when children are asked to draw a person on paper, while they become stronger, when they are asked to draw themselves. Therefore, when drawing is used for the assessment of the child's inner world, the guideline given to children is the following: "Please, draw a person on this paper". The assessment of the children's career interests, related to their career self-concept, for the present study, followed three of the criteria imposed by the literature in relation to the assessment of a child's inner world (Kounenou, 2007; Kroti & Mani, 2003; Machover, 1949; Malchiodi, 1998) as following: A) *Position of the drawing in the paper*. The figure placed at the centre of the paper implies that a person is feeling secure and confident, while figures placed at the edges of the paper imply feelings of insecurity and anxiety. B) *Size of the drawing figure*. Larger figures imply positive self-esteem, high self-confidence and extraversion, while very small figures imply low self-esteem, lack of self-confidence, and introversion. C) *Details.* The enrichment of figures with details, implies more knowledge on the discussed issues, feelings of security and adequate emotional maturity, while the absence of details implies emotional immaturity and feelings of shame. The criteria selected for the purposes of the present study are the ones that assess child's self-confidence and self-esteem, allowing to test for changes in a child's attitude towards self and his/her perceptions/views.

The second author, who is a certified psychoanalytic psychotherapist, as well as a second certified psychologist in the assessment of projective drawing, analysed and transcribed the data, so that the final evaluation would be as objective and unbiased as possible. There were no differences between the two assessments.

Semi-Structured Interview

One-to-one semi-structured interviews, as well as projective techniques such as the drawing assessment, are preferred in IPA for data collection because they elicit detailed thoughts and feelings from participants (Smith et al., 2009). Therefore, a semi-structured interview schedule was conducted, based on relative career theory and research related to children's career knowledge and interests (e.g., Holland, 1997; Porfeli, 2008; Porfeli & Lee, 2012; Tyler, 1964). The semi-structured interview contained 5 open-ended questions. The questions for the interview concerned children's drawings and were the following:

1. What job does this person do?

2. Does he/she like the job he/she is doing?

3. Do you like that job?

4. What do you want to be when you grow up?

5. What is the job you do not want to do?

Apart from the first question, which was used as an introductory one to the interview, the other four were selected in order to explore children's interest in relation to jobs (Crites, 1969; Germeijs, Verschueren, & Soenens, 2006; Patton & Porfeli, 2007; Porfeli & Lee, 2012). Children's responses to the Questions 1, 4, and 5 were coded, according to the six personality types (Holland, 1997) and the responses to Questions 2 and 3 were coded as yes or no. The standardized open-ended interviews were conducted in the same order with all participants and they had been decided beforehand, enhancing the comparability of the responses (Cohen, Manion, & Morrison, 2007). Prior to the interviews, short demographic questionnaires were completed by the children, with the help of the teacher, in order to obtain background information such as family structure, parental educational profile and job.

Procedure

The study was carried out from January to June 2014. Children were allowed to participate after the acquisition of their parents' informed consent. The head teacher was informed about the aims and objectives of our research. Parents were also informed about the study that was going to take place in the school and they all provided their informed consent. Before we began our research, we also asked for the children's permission because as Ford, Sankey, and Crisp (2007) have stated, it is important that children agree to take part. The children were willing to participate.

One A4 sheet of white paper was given to each child along with a plain pencil. Children of all groups were asked to "draw a person who does a job". All children of all groups were subsequently interviewed individually on the predetermined questions. All interviews were recorded. Only children in the experimental groups received the intervention program. Children in the control group did not receive any special treatment and career information nor they did get involved in any career education lesson activities, but they were involved in regular curricula activities. Both groups' activities were conducted in the classroom by their class teacher. Subsequent to the intervention, children of all groups were asked to draw a person doing a job and the same interview questions.

Results

Analysis of Interviews

The data processing was performed with the Statistical Package for Social Sciences (SPSS 17). Chi-square analysis was used to test whether there are differences between the control and the experimental groups, as the population distribution is not normal and the data are measured on nominal scales. The analysis between the groups, prior to intervention, showed no statistical significant differences in all of the responses to the five questions. The statistical analysis of the differences between the control and the experimental group, after intervention, revealed one statistical significant difference in the question "*what do you want to be when you grow up?*". It seems that the majority of students in the control group preferred the "realistic" type of jobs, while students in the experimental group preferred "realistic" and "investigative" types of jobs. Additionally, it came out that artistic and social types of jobs appeal more to students of the experimental group than in those of the control group (see Table 1).

Table 1

Results of Chi-square Test and Descriptive Statistics for the Question "What do you want to be when you grow up?"

	What do you want to be when you grow up?				
Group	**Realistic**	**Investigative**	**Artistic**	**Social**	**Enterprising**
Control	23 (56.1%)	10 (24.4%)	1 (2.4%)	5 (12.2%)	2 (4.9%)
Experimental	12 (27.9%)	12 (27.9%)	8 (18.6%)	9 (20.9%)	2 (4.7%)

Note. $\chi^2(4, N = 84) = 10.184, p < .05$.

Regarding gender and age differences between experimental and control groups, prior and after intervention, no statistical significant differences were found.

Whilst testing for gender differences in the total sample, a statistical significant difference was found between boys and girls in the question "*what job does this person do*", with boys giving more answers for realistic, whereas girls gave more answers on "social" (see Table 2).

Table 2

Results of Chi-square Test and Descriptive Statistics for the Question "What Job Does This Person Do?" and the Sex – Before Intervention

	Before: What job does this person do?					
Sex	**Realistic**	**Investigative**	**Artistic**	**Social**	**Enterprising**	**Conventional**
Boys	39 (81.3%)	2 (4.2%)	2 (4.2%)	1 (2.1%)	1 (2.1%)	3 (6.3%)
Girls	20 (55.6%)	0 (0.0%)	5 (13.9%)	8 (22.2%)	2 (5.6%)	1 (2.8%)

Note. $\chi^2(5, N = 84) = 14.769, p < .05$.

Additionally, a statistical significant difference was found, concerning the answers on the question "*what do you want to be when you grow up*" between boys and girls. The majority of boys showed a preference towards "realistic" types of professions and no one responded to the "social" types, whereas girls' answers were distributed between all categories (see Table 3).

Table 3

Results of Chi-square Test and Descriptive Statistics for the Question "What Do You Want to Be When You Grow Up?" and Sex – Before Intervention

Sex	Before: What do you want to be when you grow up?				
	Realistic	Investigative	Artistic	Social	Enterprising
Boys	28 (58.3%)	12 (25.0%)	6 (12.5%)	0 (0.0%)	2 (4.2%)
Girls	11 (30.6%)	8 (22.2%)	6 (16.7%)	7 (19.4%)	4 (11.1%)

Note. $\chi^2(4, N = 84) = 14.458$, $p < .05$.

On the other hand, no statistical significant gender differences were found in the questions "*do you like that job*", "*does he/she like that job*", and "*what is the job you don't want to do*".

No statistical significant age differences were found, with the exception of the question "*Do you like that job*", before and after the intervention respectively, where younger students gave less or no negative answers in comparison to older ones (see Tables 4 and 5).

Table 4

Results of Chi-square Test and Descriptive Statistics for the Question "Do You Like That Job?" and Age – Before Intervention

Age	Before: Do you like that job?	
	Yes	No
8 years	38 (95.0%)	2 (5.0%)
11 years	32 (72.7%)	12 (27.3%)

Note. $\chi^2(1, N = 84) = 7.484$, $p < .01$.

Table 5

Results of Chi-square Test and Descriptive Statistics for the Question "Do You Like That Job?" and Age – After Intervention

Age	After: Do you like that job?	
	Yes	No
8 years	19 (100%)	0 (0%)
11 years	14 (58.3%)	10 (41.7%)

Note. $\chi^2(1, N = 43) = 10.316$, $p < .01$.

Additionally, no statistical differences were found concerning other demographic characteristics of the sample such as parental job. Only 10 out of 84 children stated that they had drawn a job similar to their parents', mainly the younger ones.

Analysis of Drawings

The analysis of the drawings in regards to the criteria specified, prior to the study, revealed some interesting differences between the experimental and the control groups. More specifically, in the experimental group of children aged 8, 16 children (10 boys, 6 girls) out of 19, changed the position of the drawings towards the centre of the

paper after the intervention. The same children enlarged the figure, whereas 11 (8 boys, 3 girls), drew the human figure in more detail, after intervention. In the control group none of the children changed either the position of their drawing on the paper or its size. However, 10 children out of 21 (5 boys, 5 girls), added more detail to the human figure. In the experimental group of children aged 11, 18 (10 boys and 8 girls) out of 24 changed the position of the drawing to the centre of the page, 16 children (10 boys and 6 girls) enlarged the size of the figure and 15 (10 boys, 5 girls), drew more details in their human figure after the intervention. Changes in details for the experimental groups, meant that they drew the figure after the intervention with more accuracy in facial characteristics, attire, and made a more truthful sketch of the "job" that the person was doing (e.g. a teeth technician, after intervention, had all of his tools on a workbench and a particular emphasis was given to a set of false teeth, that the technician was preparing for the patient, likewise a gardener was wearing gloves and by the use of a spade, he was digging the soil around a plant). However, in the control group, only 4 children (3 boys, 1 girl) out of 20 moved their drawing to the centre of the page, whereas 6 (4 boys, 2 girls) drew the human figure in more detail. No change concerning the size of the figure was observed for both control groups. As it can be concluded from these findings, the boys in the sample of the present study showed more changes than girls, in both experimental age groups.

Discussion

The present study attempted to evaluate the impact of a career counselling intervention program on Greek elementary students' career interests. The statistical analysis of the data, revealed an important result. More specifically, children of the experimental groups enriched their career interests concerning the question "What do you want to be when you grow up?". After the intervention, they added investigative type of jobs along with realistic. However, children of both control groups did not change their answers after the intervention. The evaluation of the drawings revealed differences between the control and experimental groups of the study. More children of the experimental groups, in comparison to those of the control ones, appeared with more changes in their drawings after the intervention. Their post-drawings revealed more self-confidence, higher self-esteem, and extraversion. Consequently, children pointed out, through their drawings, that they were more self-assured after the intervention, concerning the job they would like to do. According to the literature, the question "what do you want to be when you grow up?" reveals one's career commitment, which means the person's decision on a career and his/her identification with it (Porfeli, 2008; Porfeli & Lee, 2012).The aforementioned findings, both the statistical and the evaluative ones, support scholars' assumptions (Porfeli & Lee, 2012; Skorikov & Vondracek, 2007) that career intervention programs can benefit children's career development, if they are carried out early enough, before children establish a clear and realistic sense of self and become committed to a career decision, based on narrow alternatives.

The present study failed to depict any changes in children's career interests in regard to gender, after intervention. More specifically, no statistical significant differences were found between boys and girls of the experimental and control groups, after the intervention. This result is consistent with the findings of the evaluation of other career intervention programs carried out by other researchers (Gillies, McMahon, & Carroll, 1998; Killeen, Edwards, Barnes, & Watts, 1999).

However, the analysis of drawings revealed some interesting findings concerning the gender of the participants. Boys' drawings had more changes than girls', after intervention, while girls were more consistent to the represen-

tation of the job they preferred. According to previous research, girls present higher levels in career maturity (Greenberger, Campbell, Sorensen, & O'Connor, 1971) and it has been shown that girls decide about their careers earlier than boys and they are more stable in their career choice (McMahon & Patton, 1997).

In regards to gender differences among children of the *total* sample, boys preferred to draw realistic types of jobs, while girls preferred the social ones. Moreover, significant gender differences were revealed concerning children's career commitment to their interests. Boys pointed out realistic occupations but no social, contrary to girls, who pointed out all of the career types. Similar results were found in Lippa's (2002) meta-analysis, which demonstrated that boys had chosen realistic occupations, much more than girls and that girls had preferred more social and artistic occupations, compared to boys. Theory and research in regard to gender issues, have supported that children, by the fifth grade, have already entered a process of circumscription based on gender (Auger, Blackhurst, & Wahl, 2005; Gottfredson, 2002). It seems that the career commitment to their interests in our sample, are in accordance to the sex-typing biases of what is appropriate for women and men. It seems that a career program especially designed for potential changes in very young students' gendered stereotypical perceptions (at least in students of 6-7 years old according to Gottfredson's developmental stages) would be more appropriate and efficient for generating changes in the specific field.

As far as age is concerned, younger students of the sample were found to be more positively oriented to the jobs that they had drawn, therefore more confident in their career interests (they liked the job that they had drawn) than older ones. This finding seems to be in accordance to scholars (Hartung et al., 2005; Van der Wilk & Oppen-heimer, 1991) who have justified that the structure of career interests appears to change over time and develop from more concrete to more abstract. Eleven year old students move from powerful and imaginary heroes to more realistic, vocational interests and they get less excited about them. Taking into consideration Gottfredson's (2002) theory about children's career developmental changes, it seems that the aforementioned finding is in accordance with the assumption that younger children are more oriented to the external surrounding and as they get older, they get more oriented to the internal self and get involved in more deep processes based on the comparison of self to various jobs and career interests. The inner processes might prevent them from being enthusiastic and positive oriented to jobs, at least not at the same degree as when they were younger.

As far as the analysis of children's drawings is concerned, older children had more changes in their drawings, after the intervention, compared to younger ones. It seems that older children of the present study had concentrated in depicting a certain occupation, more complex and rendered with more details. Nevertheless, this finding is difficult to discuss in relation to career theory and research, since research (Kindler & Darras, 1997) related to the development of children's drawing ability, has addressed the fact that as children grow older, they develop a range of tactics in pictorial representation, which they use according to the needs and purpose of their drawings and the context in which their work is produced. Children of 8 years old belong to a different pictorial group than children of 11 years old. Children of 11 years old, unlike those of 8 years old, possess the technical ability to draw details in order to attribute anything they can see in the "real world" by matching conception to production.

Contrary to the findings of a research that took place in Mainland China, in which children's career aspirations were very much influenced by their parents' jobs (Liu, McMahon, & Watson, 2015), the majority of the children participated in our study did not mention an occupation that was identical or similar to that of their parents. It is possible that the low socio-economic status of the area or, in other words, the low social-economic status of the parents, acted as a discouragement in choosing one of their mother's or father's occupation. As Smith (2014) has

stated, the environmental features, such as socio-economic status, affect individual preferences, as well as any interventions used to influence them.

Limitations

Although the study revealed some important results, concerning the importance of career counselling intervention programs, a longer intervention period would be more appropriate for a more effective assessment. The small size of the sample did not permit further statistical analyses in order to search for various relationships among the different variables. The measurement methods used in this study, namely a semi-structured interview and analysis of drawings, are susceptible to subjective interpretation. In addition, the career counselling intervention program that was developed in the USA and used in this study, imposes further limitations due to cultural differences. Consequently, the challenge is not only to develop and modify instruments and programs, so that they are compatible with each country's cultural contexts, but also to develop career and educational regulations and resources that could be beneficial to local users (Leung, 2004). Therefore, a future intervention study, having considered all the above-mentioned methodological issues, could provide the literature with more generalizable evidence and conclusions.

Conclusions and Implications for Practice

The career intervention program used in this study, managed to enrich elementary students' career interests and depict a statistical significant difference between the control and the experimental groups. The analysis of the drawings revealed several changes for the experimental group, in terms of self-confidence and extraversion, leading to conclusions for the beneficial role of the career counselling intervention program in children's career development and sense of self. However, the fact that the career intervention program did not manage to make any changes concerning the gender-based career interests, leads to the conclusion that career counselling intervention practices should be introduced early enough in one's life and be especially focused on gender and social stereotype issues.

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