Life design group-based intervention fostering vocational identity, career adaptability, and career decision-making self-efficacy

Paulo Cardoso *, University of Évora, Department of Psychology, Evora, Portugal https://orcid.org/0000-0002-7069-594X

Maria Eduarda Duarte, University of Lisbon, Faculty of Psychology, Alameda da Universidade, 1649-013 Lisboa, Portugal https://orcid.org/0000-0001-7562-4780

Lisandra Pacheco, Sociocultural Center of São Pedro, Azores, Portugal

Isabel Nunes Janeiro, University of Lisbon, Faculty of Psychology, Barcarena, Portugal https://orcid.org/0000-0003-1172-228X

Suggested Citation: 

Received from January 05, 2022; revised from March 15, 2022; accepted from May 13, 2022.
Selection and peer-review under responsibility of Guest Editor: Prof. Jacobus G. Maree, University of Pretoria, Faculty of Education, Pretoria, South Africa.
©2022 Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi. All rights reserved.

Abstract
This study examines the process and outcome of a life design group intervention with grade 9 students. In a sample of 139 participants (91 girls and 48 boys), a quasi-experimental design was applied to analyse the intervention’s effectiveness at fostering vocational identity, career adaptability and career decision-making self-efficacy. Seventy and 69 participants were included in the experimental and control groups, respectively. Outcome measures were applied at the onset of the intervention, at the end of counselling and three months after the last session. A focus group involving 17 participants was conducted to determine participants’ perceptions of the intervention process and outcome. The findings support the empirical evidence on the effectiveness of life design group-based interventions to foster vocational identity, career adaptability and career decision-making self-efficacy. The focus group participants evaluated the intervention as useful by fostering reflexivity and a sense of direction. Overall, the findings suggest the relevance of life design practices in educational settings to foster reflexivity and, therefore, to facilitate students’ career construction. The research implications of the findings are also discussed.

Keywords: Life design, vocational identity, career adaptability, reflexivity, adolescents

* ADDRESS OF CORRESPONDENCE: Paulo Cardoso, Department of Psychology, Largo dos Colegiais 2, 7004-516 Évora, Portugal
Email address: pmsc@uevora.pt
Life design group-based intervention fostering vocational identity, career adaptability, and career decision-making self-efficacy

1. Introduction

To facilitate the development, career interventions must consider the changing nature of work and the unpredictability of career paths. The route to follow is the execution of interventions built upon a new paradigm in which psychological and contextual differences can be considered (Duarte, 2018). Responding to these challenges, the Life Design paradigm (LD; Savickas et al, 2009) emphasizes the interpretative and interpersonal processes underlying vocational behaviour and career development. This basic idea provides a framework for LD practices structured around four pillars: (1) life-long, to support the continuous need of individuals to acquire the skills required to face career challenges; (2) holistic, to consider all career roles; (3) contextual, to attend to the singularity of each individual living in particular contexts; and (4) preventive, to anticipate the management of career barriers and at-risk situations. These core ideas led to career interventions fostering narratability and adaptability. Narratability is fundamental for individuals to construct their narrative identity, that is, “an autobiography that provides life with meaning and purpose” (Savickas, 2019a). Indeed, fostering narrative identity paves the way for the construction of a coherent sense of self, which is fundamental to strengthen an individual’s sense of security necessary to manage career challenges (Giddens, 1990). In turn, to foster career adaptability, which includes concern about the vocational future, control over the future, curiosity to explore possible selves and future scenarios, and confidence to pursue aspirations, it is also fundamental to manage the unpredictability of career transitions (Savickas, 2020).

Research on LD interventions has found evidence for their efficacy in group and one-to-one counselling (Cardoso & Duarte, 2021). However, there is a need for more research on the potential of narrative approaches to group interventions with adolescents. Research reveals that during narrative approaches to career counselling, adolescents aged from 14 to 16 years old have difficulty narrating self-experience (Cardoso et al., 2017). These findings are justified by developmental limitations in their capacity for autobiographical reasoning, which is fundamental to elaborating a continuous and coherent life narrative (Habermas & Bluck, 2000). Hence, the main objective of the present study is to analyse the process and outcome of a group intervention based on LD practices in 9th grade students.

1.1. Facilitating adolescent’s vocational development

Vocational development is of great relevance to adolescents’ identity formation (Erikson, 1968). In the matrix of LD paradigms, facilitating the construction of career plans is a way to foster the self—organization necessary to project the self into numerous social roles (Savickas, 2011). In line with this, research has shown that individual and group LD practices are effective in fostering vocational identity (Cardoso & Sales, 2019), career decision-making difficulties (Barclay & Stoltz, 2015; Cardoso et al., 2016; Cardoso et al., 2017; Cardoso & Sales, 2019; Di Fabio & Maree, 2011; Obi, 2015), and career adaptability (Santilli et al., 2019). The positive effect of LD practices and other approaches to vocational development associated with academic success (Choi et al., 2015; Negru-Subtirica & Pop, 2016; Oliveira et al., 2017), well-being (Obi, 2015; Santilli et al., 2019), and distress (; Milot-Lapointe et al., 2019) also emerges. The findings also reveal that longer group interventions are more effective than those involving one or two sessions focused on school and occupational information or interest and aptitude test scores (Janeiro, et al., 2014; Schloss, 2011). Process research on vocational practices in general shows that good outcomes are related to written exercises that prescribe activities for clients, individualized interpretations and
feedback, modelling, attention to building support, and updated occupational information (Brown & Krane, 2000; Cardoso et al., 2017).

1.2. A Life Design group intervention with adolescents

The intervention aims to foster narratability, career adaptability and career decision-making self-efficacy in 9th grade students; however, the activities can be adapted to high school adolescents. The intervention involved eight sessions with approximately 50 minutes each. Table 1 presents the goals of each session.

[Insert table 1 about here]

As Table 1 shows, the influence of the LD paradigm is evident in the focus on the singularity of individual experiences to facilitate the construction of narrative identity and career adaptability. The emphasis on narrative identity development mainly occurs in sessions 1 to 5, which aim to support problem formulation and the exploration of interests and personal capabilities (e.g. conversation about school learning experiences or leisure activities to explore interests and skills). In turn, career adaptability is emphasized across all program sessions. In sessions six and seven, adaptability resources are evoked through activities aiming to foster career exploration attitudes and behaviours. As an example, in one of these sessions, participants produce a guide to interview professionals in their field of interest.

In all sessions, counsellors begin activities by inviting participants to discuss the topic of each session, favouring the free expression of personal experiences, doubts and ideas. Next, to avoid excessive disclosure, participants are invited to deepen the narrative elaboration on personal experiences through written exercises. During this phase, counsellors are attentive to the need for individualized support. When necessary, they facilitate narrative elaboration of thoughts, emotions, and personal experiences that are more difficult to express during dialogue with the group. To make it easier, these support groups have a maximum of 15 participants.

During the sessions, it is important to be sensitive to working alliance ruptures. The quality of a working alliance is fundamental for everyone to feel safe to express personal experiences in groups and the success of career interventions (Whiston et al., 2016). Critical moments that threaten a working alliance occur, for example, when counsellors’ values, expectations and beliefs bias the transmission of career information or when counsellors are invited by an undecided participant to suggest the “best path” to follow (Cardoso et al., 2012). Our practical experience also shows that during group interventions, working alliances are challenged when some adolescents devalue the participation of their colleagues.

In short, the program “Who am I, where am I going to” is grounded in the LD paradigm since its activities are based on life-long and preventive conceptions of career practices. The focus on fostering narratability and career adaptability through activities emphasizing the exploration of the singularity of personal experiences and relationships to facilitate meaning-making are other markers of the LD paradigm.

1.3. Study purpose

Responding to the need for research analysing the effectiveness of LD career interventions with adolescents, this study had two goals. The first goal is to analyse the effectiveness of an LD-based intervention to foster career adaptability, vocational identity, career decision-making self-efficacy, and vocational certainty in a sample of grade 9 Portuguese students. Using a quasi-experimental design, we tested the following hypotheses:
H1: The levels of career adaptability, vocational identity, career decision-making self-efficacy, and vocational certainty will increase significantly among participants enrolled in the intervention compared with those of the control group participants.

H2: The gains achieved during the intervention will remain stable three months after the intervention.

Complementing the outcome assessment, the second goal of our study is to analyse the intervention process. In that sense, the following research question was elaborated: what are the participants' perceptions of the intervention process?

By assessing the effectiveness of the program “Who am I, where am I going to”, this study also responds to the call for more research on the long-term impact effects of career interventions (Perdrix et al., 2012).

2. Method
2.1. Participants

The sample included 139 adolescents, including 91 (65.47%) females and 48 (34.53%) males, from grade 9, attending public Portuguese schools (Azores Islands). Participants’ ages ranged from 13 to 20 years old \((M = 14.6, \text{DP} = 1.15)\). A total of 70 participants, including 44 (62.86%) females and 26 (37.14%) males, were assigned to the experimental group. Their ages ranged from 13 to 17 years old \((M = 14.3, \text{DP} = 0.84)\). The subsample of the control group included 69 participants, including 47 (68.12%) females and 22 (31.88%) males, with ages from 13 to 20 years old \((M = 15.0, \text{DP} = 1.33)\).

The focus group data included a total of 17 adolescents from the experimental group, all of whom attended both schools involved in this study. Regarding the participants, 13 (76.5%) were female and 4 (23.5%) were male, with ages ranging from 13 to 15 years old \((M = 14.1, \text{DP} = 0.5)\).

2.2. Counsellors and training

The intervention was conducted by two master’s students who have extensive experience in career counselling research and practice and who were supervised by the first author. The counsellors’ theoretical training occurred during the curricular unit of the master's course. All the intervention sessions were supervised within the scope of their curricular internship activities in the master's course of psychology.

2.3. Measures

Adaptability - The Career Adapt – Abilities Scale (CAAS; Savickas & Porfeli, 2012), specifically, the Portuguese version (CAAS – Portugal Form; Duarte et al., 2012), was used. The CAAS comprises 28 items rated on a five-point scale, ranging from 1 (not strong) to 5 (strongest). This measure assesses adaptability resources in four dimensions, each with seven items: concern, control, curiosity, and confidence. The reliability estimates, using Cronbach’s alpha, of the CAAS-Portugal Form were as follows: total score (.90), concern (.76), control (.69), curiosity (.78) and confidence (.79) (Duarte et al., 2012). In the present study, Cronbach’s \(\alpha\) for the total score was .93 (pretest), .96 (posttest) and .97 (follow-up), respectively.

Vocational Identity – This dimension of vocational behaviour was assessed using the Vocational Identity Scale (VIS), which is a subscale of the My Vocational Situation (Holland et al., 1980). In this subscale, vocational identity is defined as the “possession of a clear and stable picture of one’s goals, interests, personality and talents” (Holland et al., 1980, p.1) and assessed by 18 true-false items. Estimates of the internal consistency (KR-20) were .78 for high school students (Santos, 2010). In this study, the
estimates of internal consistency were KR-20 = .79 (pretest), KR-20 = .82 (posttest) and KR-20 = .82 (follow-up).

**Career decision-making self-efficacy** – Beliefs in personal competence for making career choices was assessed using the Portuguese form (Silva et al., 2009) of the Career Decision Making-Efficacy Scale – Short Form (CDSF-SF; Betz et al., 2005). This measure is organized into five subscales: accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving. The CDSE-SF is composed of 25 items, answered on a 5-point Likert-type scale ranging from 1 (not at all confident) to 5 (totally confident). In the Portuguese adaptation of this measure, the correlation coefficients between the scales ranged from moderate ($r = .45$) to strong ($r = .72$). The estimates of the internal consistency (Cronbach’s $\alpha$) were .90 for the total score (Silva et al., 2009). In this study, the estimates of the internal consistency for the total score were .93 (pretest), .94 (posttest) and .95 (follow-up).

**Vocational Certainty** – participants’ degree of certainty in having made an adequate career decision. was assessed using the Vocational Certainty Scale (VCS; Santos, 2007). It comprises four items (e.g., “I’ve already made a definite professional choice and do not intend to change it”) rated on a 6-point scale ranging from 1 (disagree totally) to 6 (agree totally). This measure revealed Cronbach’s $\alpha$ estimates of .79 in Portuguese adolescents (Santos, 2007). In this research, the estimates of the internal consistency were .87 (pretest), .89 (posttest) and .94 (follow-up).

### 2.4. Recruitment procedures

After permission from school authorities to conduct data collection, the researchers invited the students to participate on a voluntary basis. Next, participants were informed about the research goals, anonymity, and confidentiality. Their participation required two informed consent forms: one signed by the student and the other signed by parents. The same procedure for informed consent was applied to the focus group participants.

### 2.5. Intervention and data collection

Classes were randomly assigned to either the experimental or the control group. Participants in the experimental group received eight weekly sessions while participants belonging to the control group participated in regular classes. After the follow-up assessment, the participants in the control group benefited from vocational development activities.

A quasi-experimental design including three assessment moments for both groups was implemented. The pre-test assessment (T1) occurred one week before the first session of the program. The post-test assessment (T2) was implemented on the week after the last session and follow-up (T3) three months after the end of the program.

The focus group method was conducted to obtain participants’ perceptions of the intervention process. The fourth author was the moderator in the focus group sessions. She asked three open-ended questions and moderated the communication between participants. The questions were the following: (a) Was the program helpful? (b) What activities have been the most helpful to you? (c) Which activities were difficult to conduct? To facilitate recall and dialogue regarding the program activities, the participants consulted the materials used during the program sessions.

All focus groups were conducted throughout the first week after the final session of the intervention. Each group involved from four to seven participants, an adequate number to ensure
undispersed dialogue and, simultaneously, allow a reasonable diversification of opinions (Patton, 2002). Focus group sessions were recorded and later transcribed.

2.6. Focus group analysis

Consensual Qualitative Research (CQR; Hill et al., 1997) was used to analyse focus group data. The fourth author was the coder. The first author was the auditor since he is an expert in qualitative research. Before the analysis, the auditor trained the coder in CQR by suggesting the reading of relevant literature in this field (Hill et al., 1997; Masdonati et al., 2016) and clarifying doubts through the observation of documents describing the procedures used in previous research. To avoid biased data analysis, the auditor and the coder discussed their personal expectations regarding study outcomes.

Initially, using the themes evoked by each question and previous studies on the subject as a reference (Cardoso et al., 2017; Rehfuss et al., 2011), the coder identified the domains and core ideas in the responses of each case. Then this task was audited, and discrepancies were discussed to obtain consensus between the coder and the auditor. Next, cross analysis was conducted by the coder to identify categories within each domain. For this purpose, in the transcripts of each domain, meaningful units were identified, that is, parts of the data that even if out of the context keep their meaning to the reader (Elliott & Timulak, 2005). Then, these meaningful units were clustered into categories and revised by the auditor. Again, discrepancies in data analysis were discussed to obtain a consensus, allowing the identification of domains and categories that were common to the cases under analysis.

3. Results

3.1. Intervention effectiveness

Table 2 presents the descriptive statistics for participants in the experimental and control groups at T1, T2 and T3. Preliminary data analysis revealed that both groups were equivalent for all the variables measured at T1, namely, adaptability, \( t(1, 137) = .53, p < .05 \); vocational identity, \( t(1, 137) = 1.83, p < .05 \); vocational certainty, \( t(1, 137) = .39, p < .05 \); and career decision-making self-efficacy, \( t(1, 137) = 1.67, p < .05 \).

A mixed repeated-measures ANOVA tested the effects of the intervention. The Mauchly test showed that the sphericity assumptions were violated only for career adaptability \( \chi^2 (2) = 6.05, p < .05 \). The results revealed a statistically significant main effect of the interaction of moments (T1, T2, and T3) on groups (experimental vs. control) for vocational certainty \( F(2, 272) = 5.11, p < .05, \eta^2 = .04 \); vocational identity, \( F(2, 272) = 5.33, p < .05, \eta^2 = .04 \); career adaptability \( F(1.92, 260.57) = 11.36, p < .05, \eta^2 = .08 \); and career decision-making self-efficacy, \( F(2, 272) = 14.98, p < .05, \eta^2 = .09 \). As shown in Table 2, differences favour the experimental group in all variables. To understand the participant’s differences between T1 x T2 x T3 in both groups, a repeated-measures ANOVA for each group was performed. The results showed that in the experimental group, differences between T1, T2 and T3 were significant for vocational certainty, \( F(2, 136) = 3.46, p < .05, \eta^2 = .05 \); vocational identity, \( F(2, 136) = 6.45, p < .05, \eta^2 = .09 \); career adaptability, \( F(2, 136) = 9.65, p < .05, \eta^2 = .12 \); and career decision-making self-efficacy, \( F(2, 136) = 8.13, p < .05, \eta^2 = .11 \). Post hoc comparisons between each moment revealed significant differences from pretest to posttest in vocational certainty (\( p < .05 \)), vocational identity (\( p = .02 \)), career adaptability (\( p = .0003 \)) and career decision-making self-efficacy (\( p = .02 \)). From the second to the third assessment moment, there were no statistically significant differences, suggesting that the changes achieved during the intervention stabilized over the three months after the intervention.
The analysis of the evolution of the results of the control group between T1xT2xT3 showed that there was only a statistically significant main effect for career decision-making self-efficacy, \(F(2, 136) = 6.90, p < .01, \eta^2 = .09\). Comparisons between the means at each assessment moment indicated that from the pretest to the posttest, career decision-making self-efficacy was significantly reduced (\(p = .003\)). Thus, overall, the results allowed us to verify the hypothesis that career adaptability, vocational identity, career decision-making self-efficacy, and vocational certainty significantly increase in the participants who experience the intervention compared to the participants in the control group.

### 3.2. Intervention process

Domains and categories emerging from participants’ dialogues during the focus group are presented in Table 3. Response frequencies are coded according to the criteria presented by Hill and collaborators (1997), referring to the fact that the response frequency is general when it occurs in all cases, typical if it occurs in more than half of the cases, variant if it occurs in less than half of the cases and rare if it only emerges in one or two cases. In illustrative vignettes, participants are identified by # and a number.

Data analysis led to the definition of five domains: (1) usefulness of the intervention, (2) benefits of the intervention, (3) most useful tasks, (4) difficult tasks and (5) suggestions to improve the intervention. The findings show that all participants evaluated the intervention as useful. However, one participant said that despite finding the program useful, “I am still a little undecided” (#2). He/she added the following:

"I was not able to clear all my doubts, regarding the occupations, to get to that occupation, which is the path that I have to follow, that is what I am doubting, even a little bit”.

Regarding the domain program benefits, all participants mentioned that the intervention increased their knowledge of educational or occupational opportunities. The words of participant 10 stated the following: “I received clarification about the kind of studies needed for different courses, and also about the required subjects”.

Participants typically mentioned self-knowledge as another benefit of the program. For example, knowledge of interests (e.g., “it helped to know what we like”, #4). Finally, with varying frequencies, it was mentioned that intervention allowed for a sense of direction, as revealed in the words of two participants: “it helped me to get clear ideas about my future” (#1) and “now I know that I go to sciences” (#8).

The tasks aiming to clarify career interest were typically referred by the participants. One of the participants referred to “my formula for success”, a counselling task adapted from Savickas (2019b): “It was the success formula that allowed me to confirm what I would like to be” (#9). Participants mentioned the usefulness of the session on career information with varying frequencies (e.g., “what was more helpful was the last PowerPoint about the disciplines I had in my secondary school (#7)”. Finally, the task focused on the formulation of vocational projects after the 9th year of schooling, was mentioned with rare frequency: “The activity that I found most significant was the one that helped me choose my high school course” (#1).

In the domain difficult tasks, the category self-narration was mentioned with varying frequencies, suggesting that for some participants, the verbal symbolization of internal experience is a difficult task (e.g., “I found it hard to write down what was on my mind at that moment”, #14). Finally, participants mentioned several suggestions to improve the program, namely, contact with professionals, study visits,
and adaptation of the program’s tasks to information and communication technologies, with rare frequencies:

“I found it easier to reply on the computer than write it. Now we do it all on the computer, with the internet, and not on paper” (# 5).

4. Discussion

This study analysed the process and outcome of a group intervention inspired by the LD paradigm aiming to foster adolescents’ vocational development. The findings support the hypothesis that levels of career adaptability, vocational identity, career decision-making self-efficacy, and vocational certainty would be significantly higher among participants enrolled in the intervention compared to those of the control group participants. These results are in line with those of other studies showing the effectiveness of LD practices to foster career adaptability, vocational identity and career decision making (Cardoso et al., 2017; Di Fabio & Maree, 2012; Janeiro et al., 2014; Obi 2015; Santilli et al., 2019). The second hypothesis was also confirmed, since intervention gains remained stable three months after the last session, which reinforces data from previous research on LD practices (Cardoso & Sales, 2019) and other approaches to vocational development (Kirschner et al., 1994; Pedrix et al., 2012).

Data on this intervention effectiveness were reinforced by qualitative data since all focus group participants evaluated the program as useful. Moreover, the participants mentioned program benefits regarding the development of the ability to facilitate self-discovery and the usefulness of counselling tasks to clarify interests with a typical frequency. According to Cardoso et al. (2017), participants also referred to the construction of a sense of direction as another benefit of the intervention with varying frequencies. All participants highlighted the gains in career information. This result can be explained by the phase of career development of the participants, which is characterized by the need to explore both the self and the context (Super, 1990). Thus, it is possible that program activities have responded to the need for career information, which was fundamental to managing the transition from grade 9 to 10 requiring commitment to one of four areas of secondary studies or the pursuit of vocational education.

Participants frequently mentioned the difficulties in narrating self-experience. In another study, this difficulty was reported with a typical frequency (Cardoso, et al., 2017). These findings show how the limitations of adolescents’ autobiographical reasoning impact their performance in vocational development practices. Despite the scarcity of studies on this process in career intervention, we provide an explanation. This program, unlike My Career Story (Savickas & Hartung, 2012) used in Cardoso et al. (2017), does not explore early life episodes to facilitate the rewriting of narrative identity. Our focus on recent and future experiences implies less complex narrative elaboration justifying the low level of self-narration difficulties expressed in the present study.

4.1. Limitations and future research

The main limitation resulted from not having more than one coder in the qualitative data analysis. To smooth this limitation, several procedures were applied to guarantee the study’s trustworthiness: (1) to respect the recommendable sample size for CQR (i.e., eight to 15 participants), (2) to analyze researchers’ expectations regarding data analysis, (3) to check the stability of the results and (4) to discuss the results obtained from quantitative and quantitative methods in close relation (Patton, 2002).

Future studies should deepen our understanding of the adequacy of career counselling tasks to adolescents’ development of autobiographical reasoning. This knowledge is relevant to adjust interventions to clients’ developmental level. Considering the particularities of working alliances in group
interventions, future research should analyse critical moments of the working alliance during this type of practice.

4.2. Practical implications

Our results suggest that the intervention program assessed is effective in fostering the vocational development of young adolescents, allowing stable gains in career adaptability, vocational identity, career decision-making self-efficacy and vocational certainty. The low difficulty of participants narrating self-experience, regarding what occurred in Cardoso et al.’s (2017) study, suggests that, with adolescents aged 14 to 15 years old, counselling tasks should explore recent life experiences to avoid complex narrative elaborations (e.g., connecting events and self-experiences that occurred in different moments and situations across life story) not fitting participants’ capacity for autobiographical reasoning.

Moreover, because this practice does not apply standardized measures for the assessment of career constructs (e.g., interests, aptitudes), it has the advantage of facilitating its application in multicultural contexts. Participants’ suggestions for the program to include more activities involving contact with the world of work (e.g., study visits, interviews with professionals and experiences with work contexts) should be considered in future practice. Finally, we highlight the suggestion to develop an online version of the program allowing remote group interventions, which is of utmost relevance as evidenced by the current pandemic context.

5. Conclusion

This study contributes to empirically validating approaches in the LD paradigm to the career development of young adolescents. Overall, the findings suggest the importance of this approach to adolescents’ vocational development fostering self-knowledge, commitment to educational and vocational pursuits, and, consequently, the formation of adolescents’ identity.

However, to maximize the effectiveness of these practices, it is fundamental to adjust the intervention to the youngsters’ level of autobiographical reasoning development.

As important as the results, we consider the relevance of life design practices in educational settings viewed as interventions’ intermediary strategies to adopt reflexivity facilitating students to give meaning and purpose to their lives and career framed and based in the concept of decent work. In the face of the current, uncertain world, with scarce resources, the individual is confronted with different and diversified means of survival. Assuming this current truth, LD practices can contribute to self-knowledge on the meaning and relevance that must be attributed to all “topographies”, processes and roles based on vocational development. In other words, LD practices in their areas of research, theorization and intervention can also contribute to the development and consolidation of integrative perspectives (school and organization, young people and adults, technologies and robotics, intelligence and human thought), which promote the sustainability of a life lived with more dignity, thus returning to the “humanist” sense of service to the “other” that characterizes, in its essence, the vocational and counselling fields.

References


**Table 1: Intervention program and student goals of each session**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Goals</th>
</tr>
</thead>
</table>
| Session 1 | To know the intervention program  
To formulate the career problem |
| Session 2 | To sensitize participants to the importance of self-knowledge to career management  
To analyse the expressed interest in personal experiences |
| Session 3 | To conduct a qualitative assessment of interests  
To identify daily activities related to interests assessed |
| Session 4 | To analyse personal capabilities from personal experiences |
Session 5  
To relate interests, capabilities, and personal experiences to occupations

Session 6  
To form a list of occupations
To explore courses and occupations related to personal interests and capabilities

Session 7  
To know the structure of the education system and training opportunities

Session 8  
To relate self-knowledge to educational opportunities
To construct new career plans
Table 2

Means and standard deviations of the experimental and control groups at time 1, time 2 and time 3

<table>
<thead>
<tr>
<th>Measures</th>
<th>Experimental group (n = 70)</th>
<th></th>
<th>Control group (n =69)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td>T2</td>
<td>T3</td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>1. Adaptability</td>
<td>3.83</td>
<td>0.48</td>
<td>4.03</td>
<td>0.46</td>
<td>4.06</td>
</tr>
<tr>
<td>2. Vocational Identity</td>
<td>1.50</td>
<td>0.23</td>
<td>1.57</td>
<td>0.26</td>
<td>1.58</td>
</tr>
<tr>
<td>3. Vocational Certainty</td>
<td>4.23</td>
<td>1.26</td>
<td>4.52</td>
<td>1.27</td>
<td>4.52</td>
</tr>
<tr>
<td>4. CDMSE</td>
<td>3.48</td>
<td>0.59</td>
<td>3.69</td>
<td>0.54</td>
<td>3.75</td>
</tr>
</tbody>
</table>

Note: CDMSE = Career Decision-Making Self-Efficacy
Table 3

*Focus group response domains, categories, and frequencies (n = 17)*

<table>
<thead>
<tr>
<th>Domains and Categories</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program usefulness</strong></td>
<td></td>
</tr>
<tr>
<td>Useful</td>
<td>G</td>
</tr>
<tr>
<td>Doubts</td>
<td>R</td>
</tr>
<tr>
<td><strong>Program benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Sense of direction</td>
<td>V</td>
</tr>
<tr>
<td>Self-discovery</td>
<td>T</td>
</tr>
<tr>
<td>Information</td>
<td>G</td>
</tr>
<tr>
<td><strong>Most useful tasks</strong></td>
<td></td>
</tr>
<tr>
<td>Self-knowledge</td>
<td>R</td>
</tr>
<tr>
<td>Interest clarification</td>
<td>T</td>
</tr>
<tr>
<td>Training opportunities in educational system</td>
<td>V</td>
</tr>
<tr>
<td>Career plan formulation</td>
<td>R</td>
</tr>
<tr>
<td><strong>Difficult tasks</strong></td>
<td></td>
</tr>
<tr>
<td>Self-narration</td>
<td>V</td>
</tr>
<tr>
<td><strong>Suggestions to improve the program</strong></td>
<td></td>
</tr>
<tr>
<td>Online version</td>
<td>R</td>
</tr>
<tr>
<td>Contact with professionals</td>
<td>R</td>
</tr>
<tr>
<td>Study visits</td>
<td>R</td>
</tr>
</tbody>
</table>

Note: G = General, T = Typical, V = Variant, and R = Rare.