

# CAREER SELF-MANAGEMENT: EVALUATION OF AN INTERVENTION WITH CULTURALLY DIVERSE SAMPLES

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## Abstract

“Career Self-Management Seminar”, in its version B, (CSMS-B, [1]), is a specialized psychological intervention model designed to support academics in career exploration, goal setting, design and implementation of action plans, and monitoring and feedback obtaining, in order to facilitate career problem solving and decision making ([2]; [3]; [4]). This study aims to present and discuss the evaluation of the intervention outcomes, in a group of Portuguese young adults (EG1=16), and in a group of Mozambican young adults (EG2=16), in comparison with a control group (CG=16). Its effects on cognitive, behavioral, and emotional dimensions of the career exploration process, and on the type of participants’ career concerns were evaluated through the completion of the self-report measures Career Exploration Survey (CES, [5]; EEV, adapt. by [6]) and Adult Career Concerns Inventory (ACCI, [7]; IPC, adapt. by [8]), respectively, in two different moments in time. Implications are drawn for the design of specialized career intervention models adjusted to clients’ multicultural characteristics.

Keywords: Career self-management; career intervention; multiculturalism; evaluation.

## 1 INTRODUCTION

Career self-management is the process by which individuals take a proactive role in problem solving and decision-making about career ([9]; [3]). This process requires a systematic and continuous involvement in a diverse set of career behaviors and skills (such as exploration of self and environment, development of goals, and design of action plans), aimed to build healthy life and career trajectories ([2]).

This topic has been shared, over the past few years, by Organizational Psychology and Vocational Psychology ([4]). It is the result of a series of profound changes affecting society since the mid-20th century, but which had the capacity to influence the life of individuals and organizations. One of the most visible consequences of these changes was the need to develop new career concepts (e.g., protean career, [10]; boundaryless career, [11]; intelligent career, [12]; career anchors, [13]), that could translate, into a more appropriate way, the new career realities. New careers have become more versatile, flexible, fluid and dynamic. New careers have ceased to unfold in the context of one or two organizations, to unfold in the context of several organizations, requiring from individuals the ability to update, adapt, mold, and transfer to contexts that are, themselves, in a continuous change. These new career conditions were primarily responsible for transferring the responsibility for career management from the organizations to the individuals. Arguing that individuals have become increasingly diverse (e.g., in terms of gender, race, stage of career development, goals, motivations, needs, tenure), this responsibility rests nowadays, almost exclusively in individuals. And, despite the challenges listed by some authors ([14]; [15]), about the need to adopt a more balanced and integrative view on the responsibility for career management, the models recently developed in this topic rarely present the possibility that the career management activities of personal and organizational nature can coexist.

Currently, there are three career self-management models ([16], [9], [17]; [18], [19], [20]) that aim to support individuals in the process of taking a proactive approach to managing their career. Greenhaus and Callanan’s model ([16], [9]) considers that the career self-management concerns to a process that should occur continuously and systematically throughout the life cycle of an individual, consisting of a set of steps, such as, career exploration, career awareness, goals development, action plans implementation, feedback obtaining, and career assessment. Noe’s model ([17]) is built upon the previous model and reduces it in just three steps: exploration, goals development, and action plans implementation. And, it attempts to relate these three steps with other consequent variables, such as developmental behavior and job performance. Finally, King’s model ([18], [19], [20]) presents a four stages’ process, very similar to those previously presented by Greenhaus and Callanan ([16], [9]), with

different designations though. Its innovative character lies in the presentation of a set of antecedents (e.g., self-efficacy beliefs, and career anchors) and consequent (e.g., career satisfaction, and life satisfaction), of the career self-managing behaviors.

All these models contain a few quite innovative aspects. Firstly, these models are contextualized, as they have developed with a full awareness of the changes that were operating in organizations, and their profound impact on careers. Secondly, they are normative and cyclical career models, as they understand that change is a constant in society, and then the career management process must also be a constant in the individuals and organizations' lives. In addition, they provide a career management framework that is versatile enough to be applied at any stage of career development in the life of a working adult. And finally, they allow an easy and quick analysis of the level of effectiveness of the career management strategies undertaken, based on a set of reliable indicators.

However, despite the undeniable contribution that they represent regarding the traditional career development theories, there are some serious gaps in the existing scientific and empirical knowledge on this issue. On the one hand, the existing theoretical models within this field do not have, in general, a translation in terms of career self-management practices. That is, apart from some empirical studies (e.g., [21]; [22]), there are not known other interventions in the career self-management domain. On the other hand, these are models and intervention programs that were developed in a western culture, to act together in white working adults, with high levels of education, and with medium or high socioeconomic and cultural status, lacking, therefore, of applicability and usefulness among population groups with different characteristics from those for which they were developed. And although various authors (e.g., [23]) are unanimous about the importance that the assessment should take in any process of developing an intervention program, there is apparent resistance by psychology practitioners to the evaluation of the interventions that they develop.

Thus, this paper aims to overcome the difficulties highlighted by presenting a study that focuses on the evaluating the effectiveness of career self-management program, developed with individuals from different nations and cultural backgrounds.

## 2 METHOD

### 2.1 Participants

Participated in this study 48 young adults, from both sexes (22, 45.8% women and 26, 54.2% men, aged between 24 and 56 years old (M=32.58, SD=7.92). These participants were equitably distributed by three intervention groups.

Participants in the experimental group 1 (EG1), as well as, in the control group (CG), are research grant holders, who are developing their research projects at the University of Minho, a public institution in the north of Portugal. Experimental group 1 includes 7 (43.8%) women and 9 (56.2%) men, with a mean age of 34 years old (SD=6.84; Min=25; Max=49), that voluntarily enrolled in a career self-management intervention, developed by professionals of the Career Guidance and Counseling Centre of the University of Minho. Control group includes 10 (62.5%) women and 6 (37.5%) men, with a mean age of 29.31 years old (SD=7.31; Min=24; Max=48), which didn't attend to any career counseling program during the considered evaluation period. Experimental group 2 (EG2) includes 5 (31.2%) women and 11 (68.8%) men, with a mean age of 34.44 years old (SD=8.88; Min=26; Max=56). These participants are teachers attending the course of Vocational Guidance Theories and Practices of the Master in Psychology and Education, at the Pedagogical University, in Maputo.

Table 1 presents participants' socio-demographic characteristics.

Table 1. Socio-demographic data

Sample	N		Sex		Age			Work mean time			Company/University mean time			Research position mean time			Change in position Yes (%)
	Freq. (%)		F (%)	M (%)	Mean (SD)	Min	Max	Mean (SD)	Min	Max	Mean (SD)	Min	Max	Mean (SD)	Min	Max	
EG1	16 (33.3%)	7 (43.8%)	9 (56.2%)	34 (6.86)	25	49	109.88 (116.12)	2	372	42.19 (45.139)	6	144	24.06 (20.16)	6	72	6 (37.5%)	
EG2	16 (33.3%)	5 (31.2%)	11 (68.8%)	34.44 (8.88)	26	56	90.12 (96.14)	24	410	51 (25.74)	24	120	34.88 (20.34)	6	72	15 (93.8%)	
CG	16 (33.3%)	10 (62.5%)	6 (37.5%)	29.31 (7.31)	24	48	76.44 (93.99)	5	336	34.25 (32.65)	5	96	16.12 (13.24)	2	48	5 (31.2%)	
Total	48 (100%)	22 (45.8%)	26 (54.2%)	32.58 (7.92)	24	56	92.15 (101.32)	2	410	42.48 (35.35)	5	144	25.02 (19.44)	2	72	26 (54.2%)	

## 2.2 Instruments

Career Exploration Survey (CES; [5]; adapt. by [6]) is a self-report questionnaire which assesses the career exploration construct in its cognitive, behavioral, and affective dimensions ([6]). In its adapted version, it consists of 54 items, organized into five beliefs about the exploration process (Employment Outlook, Certainty of Exploration Outcomes, External Search Instrumentality, Internal Search Instrumentality, and Importance of Preferred Position), four exploration behaviors (Self-Exploration, Environment Exploration, Intentional-Systematic Exploration, and Amount of Acquired Information), and three reactions to the exploration process (Satisfaction with Information, Exploration Stress, and Decision Stress) (see table 2). All items are constructed in a Likert and a graphic-numeric format, with five response categories in items 1 through 43, and seven response categories in items 44 to 53 (where 1 means “very little”, or “low probability”, and 5 or 7 means “very much”, or “often” or “very high probability”). The 54<sup>th</sup> item requires an open response, and enables each participant to indicate the number of vocational areas explored so far. Studies recently developed with adult college students and non-students, confirm its psychometric robustness, indicating a factorial solution consisting of 12 factors, with Cronbach's alpha between .60 and .89. (e.g., [24], p.211; [25]).

Adult Career Concerns Inventory (ACCI; [7]; adapt. by [8]) is a self-report questionnaire which assesses the type of participants' of career concerns related to their career development tasks. In its adapted version, it consists of 61 items organized into 15 groups, each group corresponding to the career development phases of Exploration (items 1 to 15), Establishment (items 16 to 30) Maintenance (items 31 to 45) and Disengagement (items 46 to 60), according to the Adult Career Development Model suggested by Donald Super. Within each group/phase, the 15 items are distributed in groups of five by the respective subphases contained in the same career development model (see table 2). Of these, 60 items are constructed in a Likert and a graphic-numeric format, with five response categories (where 1 means “not concerned” and 5 means “very concerned”). Item 61 assesses different situations concerning the possibility of a career change, and participants must select the one that best describes their current career projects. Studies recently developed with this instrument show adequate levels of reliability and validity, indicating Cronbach's alphas between .89 and .94 in the scales, and .73 and .91 in the subscales ([26]).

Table 2. Career Exploration Survey (CES) and Adult Career Concerns Inventory (ACCI): dimensions definition

Measures	Scales	Subscales	Definition
Career Exploration Survey (CES)	Beliefs of Career Exploration	Employment Outlook	Evaluation of favorable employment opportunities in the preferred area
		Certainty of Exploration Outcomes	Degree of certainty about the achievement of a favorable position in the labor market
		External Search Instrumentality	Probability of the professional world exploration to allow the achievement of vocational goals
		Internal Search Instrumentality	Probability of the self-exploration to contribute to the achievement of vocational goals
		Importance of Preferred Position	Degree of importance attributed to the implementation of a vocational preference
	Behaviors of Career Exploration	Self-Exploration	Degree of self exploration and retrospection held in the last 3 months
		Environment Exploration	Degree of professional exploration held in the last 3 months
		Intended-Systematic Exploration	Extent in which the demand for information about the environment and about oneself is deliberated and systematic
	Reactions to Career Exploration	Amount of Acquired Information	Amount of information acquired about oneself, the professions, jobs, and organizations
		Satisfaction with Information	The perceived satisfaction with the information obtained about the professions, jobs and organizations that is more closely related to personal interests, abilities and needs
Adult Career Concerns Inventory (ACCI)	Exploration	Exploration Stress	Amount of unwanted stress that each one feels in the exploration process, compared to other life events
		Decision Stress	Amount of unwanted stress that each one feels in the decision making process, compared to other life events
		Crystallization	Recognition of desired professional levels and fields
	Establishment	Specification	Consistent expression of a specific profession, or employment, related to the previous choices
		Implementation	Selection of a goal and an action plan for its implementation
		Stabilizing	Development of an appropriate lifestyle, characterized by autonomy and a relevant use of skills and training
	Maintenance	Consolidating	Concern with the achievement of security in the profession and in the organizations in which one person is
		Advancing	Concern about the possibility of progress in the financial plan and for more challenging levels of responsibility
		Holding	Concern about the maintenance of the status and the position acquired in a given profession
	Disengagement	Updating	Need to be attentive to new developments as the professional field and the individual goals change
Innovating		Need to explore or do things differently	
Deceleration		Possible need to reduce the role of worker	
	Retirement Planning	Concern resulting from the desire to withdrawn from the professional activity	
	Retirement Living	Transition to retirement, that is, decrease in the importance credited to the role of worker over other life roles	

## 2.3 Procedure

Career Self-Management Seminar, in its version B (CSMS-B; [1], [2]) is a specialized career intervention program, designed to support academics in career exploration, goal setting, design and implementation of action plans, and monitoring and feedback obtaining, in order to facilitate career problem solving and decision making ([2]; [3]; [4]). It includes: i) an introductory session, of presentation and involvement of all participants, and pre-test measures administration; ii) a session of analysis on each participant' personal career trajectory; iii) a session of skills assessment, and also, of interests, values, life roles, and work styles exploration; iv) a session of goals development, and hypothesis testing; v) a session of stimulation to an entrepreneurial career; and, vi) a session of learning consolidation and generalization, and administration of post-test measures (see table 3).

Table 3. Career Self-Management Seminar: structure and content

CSMS-B	
Session	Goals
0 Beginning	<ul style="list-style-type: none"> <li>- Reception and initial involvement</li> <li>- Establishment of a collaborative help relationship</li> <li>- Administration of pre-test measures</li> <li>- Evaluation of myths and expectations toward psychologist and the intervention evaluation</li> <li>- Awareness about self career management</li> <li>- Presentation of seminar themes, goals, and activities</li> <li>- Rules setting and intervention contract</li> <li>- Session evaluation</li> </ul>
1 Career path	<ul style="list-style-type: none"> <li>- Intersession reflection</li> <li>- To support participants to explore personal life and balance of personal skills and career adaptability</li> <li>- The doctoral/research work in the broader context of career/life history</li> <li>- Analysis of short, medium, and long term goals</li> <li>- Session evaluation</li> </ul>
2 Recognition and validation of career skills	<ul style="list-style-type: none"> <li>- Intersession reflection</li> <li>- Development of self-observation and self-consciousness about career management: establishment of goals, interests, skills acquired by participants through life</li> <li>- Desired lifestyle and career goals of short, medium, and long term: the role of career self-regulation</li> <li>- Session evaluation</li> </ul>
3 Establishment of a life project	<ul style="list-style-type: none"> <li>- Intersession reflection</li> <li>- Development and maintenance of a positive view on the future</li> <li>- To support the designing of career projects on the future: information exploration, and simulation of the implementation of action career plans, resources and obstacles</li> <li>- To support the reconciliation of personal, social, educational, and professional goals, and the construction of a positive view on the future</li> <li>- To conclude on this process</li> <li>- Session evaluation</li> </ul>
4 Self management of a life project	<ul style="list-style-type: none"> <li>- Intersession reflection</li> <li>- To support the designing of future projects: deepening the process of creating their own job and approaches to job attainment</li> <li>- Job interview simulation</li> <li>- To conclude on this process</li> <li>- Session evaluation</li> </ul>
5 Conclusion	<ul style="list-style-type: none"> <li>- Intersession reflection</li> <li>- Development and maintenance of a positive view on the future</li> <li>- Consolidation and generalization of the learning undertaken throughout the intervention process</li> <li>- Intervention evaluation</li> <li>- Administration of pos-test measures</li> <li>- Conclusion of the intervention</li> </ul>

EG1 attended this seminar as an extra-curricular activity, along six sessions, lasting 120 minutes each, developed weekly. EG2 attended a more intensive version of this seminar, over nine days, in the course of Vocational Guidance Theories and Practices. And, CG didn't attend to any psychological intervention within the considered period of time.

In both experimental groups, the assessment instruments were applied immediately before and after the intervention, and at the control group the assessment instruments were applied in corresponding periods of time, taking its completion, on average, 45 minutes. Data were introduced in a computer database and processed by the statistical software SPSS (Statistical Program for Social Sciences – for Windows, version 16.0) Descriptive statistics were used to characterize participants' socio-demographic condition, as well as, parametric statistical analysis to assess the existence of statistically significant differences within and between groups and assessment moments.

### 3 RESULTS

Tables 3 and 4 present the frequencies, and the differences within and between groups and pre and post-test moments, in the career exploration and in the career concern subscales.

At the pre-intervention moment, there are statistically significant differences between the three intervention groups, that is, the experimental group 1 (Portuguese academics with CSMS-B), the experimental group 2 (Mozambican academics with CSMS-B), and the control group (Portuguese academics without CSMS-B). Experimental groups 1 and 2 are statistically different in two CES subscales - Certainty of Exploration Outcomes and Exploration Stress; and, in five ACCI subscales - Consolidate, Update, Deceleration, Retirement Planning, and Retirement Living - with higher scores in the experimental group 2, in all cases. At the same time, the experimental group 1 has statistically significant differences from the control group in four ACCI subscales - Stabilizing, Consolidating, Deceleration and Retirement Living, with higher scores in the control group. And, the experimental group 2 differs, in a statistical significant way, from the control group, in three CES subscales – Employment Outlook, Certainty of Exploration Outcomes, and Decision Stress, with higher scores in the experimental group 2.

Regarding the analysis of statistically significant differences between pre and post-test moments, in each intervention group, results of the t test for paired samples, indicate that, after the intervention, experimental group 1 has higher beliefs about the Certainty of Exploration Outcomes and about the Internal Search Instrumentality, higher Environment Exploration behaviors, and also higher levels of Satisfaction with Information. Experimental group 2 has higher beliefs about the Internal Search Instrumentality, higher Self-Exploration behaviors, and also higher levels of Satisfaction with Information.

In relation to the Exploration Stress, while experimental group 1 increases this reaction after the intervention program, the experimental group 2 decreases it, in a statistically significant way. Control group achieves also, at post-test, higher beliefs about Internal Search Instrumentality. In what concerns to the career concerns dimensions, only the experimental group 1 registers a statistically significant decrease, between pre and post-test moments, in the Innovating subscale.

Regarding the comparison between groups at post-test, having as covariate the pre-test results, there are significant differences among the three groups, particularly in the dimensions of the CES. Thus, the experimental group 1, when compared with the experimental group 2, has higher levels of Exploration Stress and lower concerns related to the Stabilizing subscale. In turn, the experimental intervention 1, when compared with the control group, has higher beliefs about the Certainty of Exploration Outcomes, and more Intended-Systematic Exploration behaviors. Finally, the experimental group 2, when compared with the control group, has higher External Instrumentality beliefs, and more Self and Environment Exploration behaviors.

Table 3. Career Exploration Survey: frequencies and differences within and between groups and pre and post-test moments

Measures	Scales	Subscales	Mean Score	EG1 (N=16)				t (15)	EG2 (N=16)				t (15)	CG (N=16)				t(15)	Pre-test				Post-test			
				Pre-test		Post-test			Pre-test		Post-test			Post-test		Pós-teste			F (2,45)	EG1-EG2	EG1-CG	EG2-CG	F (2,44)	EG1-EG2	EG1-CG	EG2-CG
				Mean	SD	Mean	Mean		Mean	SD	Média	DP		Média	DP	Média	DP									
Beliefs of Career Exploration	Employment Outlook	9	8.81	3.21	<b>10.06</b>	2.65	-1.855	<b>10.13</b>	3.01	<b>10.81</b>	2.88	-1.037	7.31	2.75	8.13	3.4	-988	<b>3.533*</b>	-1.313	1.5	<b>2.813*</b>	.982	-.051	1.139	1.19	
	Certainty of Exploration Outcomes	9	7.31	3.28	8.81	3.47	<b>-3.985**</b>	<b>11.81</b>	3.71	<b>12.31</b>	3.03	-.624	7.75	3.79	7.25	4.19	1.054	<b>7.606**</b>	<b>-4.5**</b>	-.438	<b>4.063**</b>	<b>3.679*</b>	.058	<b>1.908*</b>	1.850	
	External Search Instrumentality	12	<b>15.56</b>	2.83	<b>16.56</b>	2.58	-2.07	<b>16.44</b>	3.44	<b>18</b>	2.07	-1.775	<b>15.63</b>	3.36	<b>14.69</b>	3.7	1.507	.360	-.867	-.0625	.8045	<b>6.387**</b>	-.973	1.909	<b>2.881**</b>	
	Internal Search Instrumentality	30	<b>36.56</b>	6.74	<b>42.38</b>	5.91	<b>4.593***</b>	<b>36.44</b>	5.59	<b>43.88</b>	6.66	<b>3.661**</b>	<b>34.63</b>	9.14	<b>39.94</b>	8.9	<b>2.711*</b>	<b>.339</b>	.2065	1.938	1.73	.932	-1.607	1.437	3.044	
	Importance of Preferred Position	9	<b>11.13</b>	1.93	<b>11.69</b>	2.33	-1	<b>11.26</b>	2.32	<b>11.75</b>	2.79	-.907	<b>10.25</b>	2.79	<b>10.81</b>	2.95	-.839	.834	-.117	.875	.992	.093	.013	.309	.296	
Behaviors of Career Exploration	Self-Exploration	12	11.69	4.25	<b>12.75</b>	3.57	-1.031	11.25	3.47	<b>14.61</b>	3.21	<b>3.625**</b>	9.5	3.35	10.69	3.91	-1.48	1.555	.4375	2.188	1.75	<b>3.698*</b>	-1.997	1.035	<b>3.032*</b>	
	Environment Exploration	15	<b>15.63</b>	5.18	<b>19.5</b>	3.86	<b>-3.089**</b>	<b>16.56</b>	4.38	<b>18.56</b>	4.86	-2.272*	13.5	4.65	13.25	5.01	.191	1.749	-.9375	2.125	3.063	<b>6.82**</b>	1.396	<b>5.21**</b>	<b>3.814*</b>	
	Intended-Systematic Exploration	6	5.94	1.95	5.75	1.69	.426	5.31	1.78	<b>6</b>	1.55	-1.842	5.06	1.73	5.44	1.93	.899	.979	.625	.875	.25	.714	.590	-.164	.426	
	Amount of Acquired Information	9	<b>10.22</b>	2.01	<b>11</b>	2	-1.926	<b>10.38</b>	2.55	<b>11.25</b>	2.14	-2.004	<b>10.38</b>	1.96	<b>10.81</b>	1.83	-.89	.027	-.1562	-.1562	.0000	.326	-.159	.279	.438	
Reactions to Career Exploration	Satisfaction with Information	9	<b>9.63</b>	1.93	<b>10.94</b>	2.46	<b>-3.238**</b>	<b>9.19</b>	2.69	<b>10.56</b>	2.71	<b>-2.551*</b>	<b>9.81</b>	1.68	<b>10</b>	2.07	-.417	.358	.4375	-.1875	-.625	1.793	.043	1.08	1.037	
	Exploration Stress	16	9.31	2.52	13.63	4.9	<b>-3.637**</b>	14.69	5.15	10.75	6.16	<b>2.585*</b>	10.94	3.8	12.81	4.05	-1.724	<b>7.616**</b>	<b>5.352**</b>	-1.625	<b>3.727*</b>	<b>4.295*</b>	<b>5.551*</b>	1.625	-3.926	
	Decision Stress	20	17.06	7.42	17.63	7.98	-.332	19	9.42	15.92	9.64	1.463	14.5	5.51	16.19	8.12	-1.004	1.403	-1.938	2.563	4.5	1.048	3.018	-.286	-3.304	

Table 4. Adult Career Concerns Inventory: frequencies and differences within and between groups and pre and post-test moments

Measures	Scales	Subscales	Mean Score	EG1 (N=16)				t (15)	EG2 (N=16)				t (15)	CG (N=16)				Pre-test				Post-test				
				Pre-test		Post-test			Pre-test		Post-test			Post-test		Pós-teste		F (2,45)	EG1-EG2	EG1-CG	EG2-CG	F (2,44)	EG1-EG2	EG1-CG	EG2-CG	
				Mean	SD	Mean	Mean		Mean	SD	Média	DP		Média	DP	Média	DP									
Adult Career Concerns Inventory (ACCI)	Exploration	Crystallization	15	<b>15.38</b>	4.26	14.94	5.23	.59	<b>16.69</b>	4.77	<b>16.06</b>	6.36	.356	14.44	5.07	13.49	3.91	.691	.920	-1.313	.9375	2.25	.400	-.52	1.016	1.536
		Specification	15	<b>16.5</b>	4.49	<b>16</b>	4.43	.707	<b>17.81</b>	6.01	<b>15.38</b>	7.07	1.507	<b>15.38</b>	5.73	14.63	5.35	.421	.802	-1.313	1.125	2.438	.249	1.263	.828	-.435
		Implementation	15	<b>16.31</b>	4.73	<b>16.31</b>	3.53	.000	<b>19.75</b>	3.75	<b>18.25</b>	5.93	1.131	<b>17.75</b>	3.86	<b>15.88</b>	4.98	1.379	2.781	-3.434	-1.438	1.996	.453	-539	1.023	1.562
	Establishment	Stabilizing	15	<b>16.13</b>	4.75	<b>16.88</b>	4.46	-.775	<b>19.31</b>	3.2	<b>18.31</b>	5.49	.735	<b>20</b>	2.97	<b>18</b>	3.79	1.675	<b>4.939*</b>	-3.188	<b>-3.875*</b>	-.6875	.110	.039	.670	.631
		Consolidating	15	<b>17.31</b>	3.81	<b>17.94</b>	3.19	-.504	<b>22.5</b>	2.85	<b>21.63</b>	2.36	1.115	<b>20.69</b>	3.66	<b>19.19</b>	3.37	1.66	<b>9.226***</b>	<b>5.188**</b>	<b>-3.375*</b>	1.813	2.631	-2.563	-.518	2.045
		Advancing	15	<b>17.75</b>	4.7	<b>16.44</b>	5.05	1.104	<b>20.88</b>	2.33	<b>20.13</b>	2.92	1.015	<b>19.13</b>	4.56	<b>18</b>	3.61	1.165	2.438	-3.125	-1.375	1.75	1.364	-2.1	-.864	1.236
	Maintenance	Holding	15	<b>17.19</b>	4.46	<b>17.13</b>	3.32	.051	<b>20.69</b>	3.34	<b>21.56</b>	2.76	-1.079	<b>19.69</b>	3.88	<b>18.75</b>	3.82	1.26	<b>3.385*</b>	-3.5	-2.5	1	<b>4.248*</b>	<b>3.065*</b>	-.644	2.42
		Updating	15	<b>19.5</b>	3.06	<b>18.81</b>	3.1	.883	<b>22.75</b>	2.21	<b>22.25</b>	2.05	.984	<b>20.56</b>	3.54	<b>18.94</b>	3.91	1.79	<b>4.931*</b>	<b>-3.25*</b>	-1.063	2.188	2.411	-1.686	.448	2.134
		Innovating	15	<b>20.19</b>	3.31	<b>18.25</b>	3.59	<b>2.257*</b>	<b>22.44</b>	1.21	<b>22.07</b>	2.69	.574	<b>20.38</b>	3.5	<b>19.13</b>	3.44	1.339	3.032	-2.25	-1.875	2.063	3.059	-2.688	.782	1.906
	Disengagement	Deceleration	15	13.13	2.76	12.94	4.01	.164	<b>16.69</b>	3.52	<b>17.5</b>	3.63	-1.033	<b>16.69</b>	3.24	<b>16.56</b>	3.14	.136	<b>6.671**</b>	<b>-3.563*</b>	<b>-3.563*</b>	.0000	2.751	-3.092	-2.155	.938
		Retirement Planning	15	11.06	3.55	11.38	3.52	-.268	<b>16.88</b>	4.57	<b>16.69</b>	5.84	.142	14.19	6.33	13.88	5.66	.242	<b>5.523**</b>	<b>5.813**</b>	-3.125	2.688	.881	-2.318	-.890	1.428
		Retirement Living	15	12	4.62	12.38	4.59	-.218	<b>19.31</b>	4.42	<b>19.69</b>	5.2	-.322	<b>17.25</b>	5.74	<b>15.88</b>	5.43	1.327	<b>9.25***</b>	<b>7.313**</b>	<b>-5.25**</b>	2.063	2.531	-4.08	-1.179	2.901

## 4 DISCUSSION AND CONCLUSION

The aim of this study was to evaluate the effectiveness of a career self-management program in distinct cultural samples.

Pre-test results show that the experimental group 2 and the control group are, in general, in worst circumstances regarding the addressed career exploration and career concern dimensions, and they represent the participants who did not voluntarily enroll themselves to attend the career program. Participants from the experimental group 2 show higher levels of stress regarding career exploration and decision making, higher levels of concern related to the achievement of security on the profession and in the organization, related to the new developments in their professional field, and also, related to the possible reduction of the current professional role, in comparison with the Portuguese academics. However, they have also more positive beliefs about the possibility of achieving their career goals, as well as, about the possibility that they will get a favorable position in the labor market. In turn, participants from the control group have higher concerns with the development of their desired lifestyle, characterized by autonomy and job security, and also with the reduction of the investment in their current role as research grant holders.

Results from the comparison between pre-and post-test, in each intervention group, indicate that, after the intervention, both experimental groups 1 and 2 are experiencing more self-exploratory behaviors, and more favorable beliefs about the role of exploration in achieving their vocational goals. Moreover, they have also higher levels of satisfaction with the career information obtained, as well as, more appropriate levels of stress associated with the career exploration process. Participants in the experimental group 1 register also an increase in their levels of certainty about the possibility that they will achieve a favorable position in the labor market, as well as, a reduction in their concerns related to the possibility to explore or do things differently at their work. In turn, participants in the experimental group 2 register an increase in their exploratory behavior around the professions, jobs and organizations. And, participants in the control group register an increase in their beliefs that the self-exploration will contribute to the achievement of their vocational goals.

The comparison between groups at post-test, using the results of the pre-test has covariates, indicates that, after the psychological intervention, the experimental group 1, compared with the experimental group 2, has higher levels of stress associated with the exploration process, and lower concerns about maintaining their current professional status and position. In turn, the experimental group 1, when compared with the control group, has higher beliefs about the possibility of reaching a favorable position in the labor market, and more systematic and intentional exploration behaviors, about themselves and the world of work. Finally, the experimental group 2, when compared with the control group, has more favorable beliefs that the professional world exploration will allow the achievement of vocational goals, and more exploratory behaviors directed to the self and the world of work.

These results indicate the effectiveness of the intervention program in modifying the cognitive, behavioral and emotional dimensions associated with the career exploration process ([6]), in culturally distinct samples, and by comparison with the non-intervention. Moreover, they also confirm the program's ability to work effectively the career management behaviors, such as the career exploration, the goal development, and the design of action plans, maintaining stable participants' levels of career concerns. According to Savickas ([27]), high levels of career concerns may result in anxiety, stress, and pessimism related to career, while reduced levels of career concerns may lead to apathy and indifference related to career.

Thus, the CSMS-B seems to have the ability to work properly the career exploration and career concern dimensions of both the Portuguese and Mozambican participants. However, we believe that, in future studies, it would be appropriate to consider the specificity criteria. That is, intervention programs should be developed for specific clients, should consider their specific characteristics and needs, and should rely on specific methods and strategies that are also specific to the populations they are intended to. Therefore, we emphasize the need to consider the effect of cultural differences in the individuals' career development, since clients who seek career counseling are increasingly diverse, and vocational theories developed in the Western context cannot always suit them ([28], [29]). Assuming this specificity in the development of our career programs is a way to ensure the success and effectiveness of those interventions.



## REFERENCES

- [1] Taveira, M. C., Silva, A. D., Loureiro, M. N., Araújo, A., Faria, L., & Pinto, J. C., & Sousa, S. (2007). "Seminário Gestão Pessoal da Carreira - versão B". [Career Self-Management Seminar – version B] Unpublished manuscript. Braga: University of Minho.
- [2] Pinto, J. C. (2010). *Gestão Pessoal da Carreira: estudo de um modelo de intervenção psicológica com bolsistas de investigação*. [Career Self-Management: a study of a psychological intervention model with research grant holders]. Unpublished doctoral dissertation, University of Minho, Portugal.
- [3] Taveira, M. C. (2009). Promoción de la empleabilidad profesional en la vida adulta: el papel de los seminarios de gestión personal de la carrera [Promoting professional employability in adult life: the role of the career self-management seminars]. Oral communication presented at X Seminario Permanente d'Orientación Profesional i Seminario Internacional d'Orientación Profesional. Adultos emergentes, transiciones, i orientación profesional, MIDE. Barcelona, Espanha.
- [4] Pinto, J. C. & Taveira, M. C. (2010). Seminário de Gestão Pessoal da Carreira: avaliação de um programa de intervenção psicológica no Ensino Superior. [Career Self-Management Seminar: evaluation of a psychological intervention program in higher education]. Conference proceedings of the I Seminário Internacional – Contributos da Psicologia em Contextos Educativos, Braga, Portugal.
- [5] Stumpf, S. A., Colarelli, S. M., & Hartman, K. (1983). Career Exploration Survey. *Journal of Vocational Behavior*, 22, 191-226.
- [6] Taveira, M. C. (1997). *Exploração e desenvolvimento vocacional de jovens. Estudo sobre as relações entre a exploração, a identidade e a indecisão vocacional* [Career exploration and development in youth] Published doctoral dissertation, University of Minho, Portugal.
- [7] Super, D. E., Thompson, A. S., & Lindeman, R. H. (1988). *Adult Career Concerns Inventory: Manual for research and exploratory use in counseling*. Palo Alto: Consulting Psychologists Press.
- [8] Duarte, M. E. (1999). Inventário de Preocupações da Carreira (IPC) [Adult Career Concerns Inventory]. In M. Simões, M. Gonçalves, & L. Almeida (Org.), *Testes e provas psicológicas em Portugal* [Psychological testing in Portugal] (pp. 49-60). Braga: SHO- Sistemas Humanos e Organizacionais.
- [9] Greenhaus, J. H., Callanan, G. A., Godshalk, V. M. (2010). *Career management* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.
- [10] Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65, 1-13.
- [11] Arthur, M. B. (1994). The boundaryless career: a new perspective for organizational inquiry. *Journal of Organizational Behavior*, 15, 295-306.
- [12] Arthur, M. B., Claman, P. H., & DeFillipi, R. J. (1995). Intelligent enterprise, intelligent careers. *Academy of Management Executive*, 9 (4), 7-22.
- [13] Schein, E. H. (1996). Career anchors revisited: implications for career development in the 21<sup>st</sup> century. *Academy of Management Executive*, 10 (4), 80-88.
- [14] Arnold, J. (1997). *Managing careers into the 21<sup>st</sup> century*. London: Sage Publications.
- [15] Baruch, Y. (2004). Transforming careers from linear to multidirectional career paths: organizational and individual perspective. *Career Development International*, 9 (1), 58-73.
- [16] Greenhaus, J. H., & Callanan, G. A. (1994). *Career management* (2<sup>nd</sup> ed.). Fort Worth, TX: Dryden

Press.

- [17] Noe, R. A. (1996). Is career management related to employee development and performance? *Journal of Organizational Behavior*, 17, 119-133.
- [18] King, Z. (2000). The development and initial test of a theory of career self-management. Unpublished doctoral dissertation, University of London, London.
- [19] King, Z. (2001). Career self-management: a framework for guidance of employment adults. *British Journal of Guidance & Counselling*, 29 (1), 66-78.
- [20] King, Z. (2004). Career self-management: its nature, causes and consequences. *Journal of Vocational Behavior*, 65, 112–133.
- [21] Kossek, E. E., Roberts, K., Fisher, S., & DeMarr, B. (1998). Career self-management: a quasi-experimental assessment of the effects of a training intervention. *Personnel Review*, 51 (4), 935-962.
- [22] Raabe, B., Frese, M., Beehr, T. A. (2007). Action regulation theory and career self-management. *Journal of Vocational Behavior*, 70, 207-311.
- [23] Whiston, S. C., Brecheisen, B. K., & Stephens, J. (2003). Does treatment modality affect career counseling effectiveness? *Journal of Vocational Behavior*, 62, 390–410.
- [24] Silva F. & Taveira, M. C. (2010). Competências de exploração vocacional de adultos não-universitários. [Career exploration skills in non-university adults]. In M. C. Taveira & A. D. Silva, *Desenvolvimento Vocacional, Avaliação e Intervenção*, [Career development, assessment and intervention] (pp. 183-196). Braga: Associação Portuguesa para o Desenvolvimento da Carreira [Portuguese Association for Career Development].
- [25] Soares, A. P. (1998). *Desenvolvimento vocacional de jovens e adultos: A exploração, a indecisão e o ajustamento vocacional em estudantes universitários* [Career development in youngs and adults: career exploration, indecision, and adjustment in university students]. Psychology master thesis. Braga: School of Psychology, University of Minho.
- [26] Rafael, M. (2001). *O modelo desenvolvimentista de avaliação e aconselhamento de carreira (C-DAC). Preocupações de carreira, crenças de carreira e stress profissional em adultos trabalhadores.* [Career assessment and career counseling developmental model (C-DAC). Career concerns, beliefs, and stress in adult workers]. Unpublished doctoral dissertation, University of Lisbon, Portugal.
- [27] Savickas, M. L. (2005). The theory and practice of career construction. In D. Brown & R. Lent (Eds.), *Career development and counselling: Putting theory and research to work* (pp. 43-70). New Jersey: John Wiley & Sons, Inc.
- [28] Flores, L. Y. & Heppner, M. J. (2002). Multicultural career counseling: ten essentials for training. *Journal of Career Development*, 28 (3), 181-202.
- [29] Kidd, J. M. (2008). *Understanding career counseling. Theory, research and practice*. London: Sage.