

Sustainable Career Development: A New Challenge in Career Counselling in the Modern Era

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ABSTRACT

Sustainable Career Development constitutes an interdisciplinary research area in the field of counseling and career guidance that is based on Sustainable Development. In this context, the aim of the manuscript is to report the importance of providing career counselling to manage one's personal and professional growth and development in a sustainable approach. In the framework of this effort, we are presenting the Sustainable Career Development Scale and putting forward a number of implications for career intervention, which relate to sustainability in career.

Keywords: career guidance, career sustainability, career development, sustainable careers

The current work contexts and workplaces are characterised by continuous changes that result in unceasing transitions for workers and hence instability in their work lives (Di Fabio & Kenny, 2016). Additionally, the pandemic impacted the way work is performed throughout the world, changed the way we live, posed threats to our health and is still having an even greater impact to the economy (Hooley, Sultana & Thomsen, 2020). Work has an important psychological function in the lives of individuals as it can contribute to the fulfilment of personal needs and serves as a bridge between the individual and society, while promoting sustainable growth and development. As a result, in the last decades of the 20th century, the term 'sustainability' began to receive special mention. This term, although directly related to 'sustainability', is much broader than its ecological dimension, as it is associated not only with conservation and stability, but also with the dynamics of renewal, in which resource use the orientation of technological developments and institutional changes are in harmony and enhance both the existing and future quality of human life (Lawrence, Hall & Arthur, 2015). Based on this approach, the field of sustainability constitutes an interdisciplinary framework of reflection involving both the natural and applied sciences as well as the social sciences and humanities (Rosen, 2017). In this context, sustainable career development is a new challenge in career counselling in the modern era that marks an innovative framework of primary prevention, which empowers individuals' ability to use their personal resources and strengths in their lives and careers (Argyropoulou & Mouratoglou, 2021).

In the present article, based on a review of the recent literature, we are attempting to give a spherical viewpoint regarding the importance of providing career counselling to manage one's personal and professional growth and development in a sustainable approach. In the

framework of this effort, we are presenting the Sustainable Career Development Scale and putting forward a number of implications for career intervention, which relate to sustainability in career.

THEORETICAL BACKGROUND OF SUSTAINABLE CAREER DEVELOPMENT

The Psychology of Sustainability and Sustainable Development highlights a meaningful and sustainable life/career construction across different environments and time, with coherence, direction, significance, purpose and a sense of belonging for people and therefore for their communities (Di Fabio, 2017). In particular, the emphasis is placed on the harmonization of the complexities related to individuals' environments (personal, social, organizational, natural), as well as on the flourishing of their talents and improvement of their well-being (Di Fabio & Rosen, 2018). For instance, individuals with a "beyond-the-self" orientation are more open, have higher levels of life satisfaction and more humanitarian tendencies/inclinations (Bronk & Finch, 2010).

Sustainable careers refer to *"the sequence of an individual's different career experiences, reflected through a variety of patterns of continuity over time, crossing several social spaces, and characterized by individual agency, herewith providing meaning to the individual"* (Van der Heijden & De Vos, 2015). Therefore, the individual, social and wider environmental systems influence career formation, creating opportunities, needs, constraints, challenges and dilemmas (Nagy, Froidevaux & Hirschi, 2018). In this light, the individual is an active agent, which in combination with the social and wider environmental system, influences career sustainability. According to Savickas (2005) individuals are the central actors in their career construction; however, the degree of their activeness is likely to depend on and interact with several dimensions of their social environment (family norms, organizational policies, occupational sector, country, and cultural factors) under a systemic perspective that extends over time (De Vos, Van der Heijden & Akkermans, 2020).

Based on this conceptualization, sustainable careers are distinguished by a multidimensional content that is not limited to a linear sequence of jobs, occupational activities and employment situations, but is characterized by a developmental approach that involves the dynamic interaction of the individual with the environment over time. Therefore, sustainable careers are influenced by the individual's work experiences, opportunities and obstacles, broader socio-economic factors and living and interaction contexts (Argyropoulou, 2021). Additional theoretical and empirical research indicates that sustainable careers could have beneficial effects on individual growth by three core indicators health (dynamic fit of career with mental and physical capacities), happiness (career satisfaction), and productivity (job performance or career potential) (Van der Heijden, 2005). Building on this context, sustainable career development constitutes a process of preserving and generating personal and social resources in a primary preventive approach. To this regard, career sustainability is strongly related to the way in which individuals utilise their resources and proactively shape their careers (Akkermans & Tims, 2017).

Hence, taking into account the theoretical and empirical background of sustainability in career the concept of sustainable career development has been proposed (Argyropoulou, Mouratoglou, Antoniou, Mikedaki & Charokopaki, 2020), which marks a proactive perspective in career development, as it supports the utilisation of both personal and social resources

(strengths) allowing individuals to fully "thrive" and make a meaningful contribution to society. In other words, sustainable career development enhances the attribution of meaning and purpose to the role of professional activity, with an awareness of its impact on the individual and society as a whole. This means that individuals recognise that they are developing, personally and professionally, seeking to maximize their potential and participating in the process of career exploration by developing goals with a social content, environmental knowledge (managing complex environments to meet personal needs and values, giving meaning to life and a sense of purpose in life), positive relationships (establishing quality links with others) and awareness of their personal responsibility towards others.

Therefore, career counselling can play a catalytic role in fostering sustainable career development by creating an intervention framework that seeks to provide adolescents, youth and adults with clearer self-awareness, a broader perspective on career-related information, assigning greater value to their career path and promoting positive personal resources (behavioral, psychological and spiritual skills) in their choice of career. Considering that the integration of sustainability goals into guidance practices will require support from career counselling practitioners in order to develop new approaches to meet the needs of sustainable development (Guichard, 2018), we believe that the development of Sustainable Career Development Scale can be considered as a scale for assessing the optimal response of individuals in their interaction with their social spaces by building and utilizing their personal resources and forces that are useful for their personal and career development, career management and career agency.

SUSTAINABLE CAREER DEVELOPMENT SCALE

Method

The SCDS was developed on the basis of the following four theoretical dimensions: (a) the subjective identity forms (SIFs) that refer to the sets of ways of being, acting and interacting in relation to a certain view of oneself in a given context (Guichard, 2009); (b) the personal growth and effective career adaptability (Savickas, 2005) in liquid contexts; (c) the social responsibility and authentic values (Di Fabio & Rosen, 2018; Di Fabio, Maree & Kenny, 2019) and (d) the balance between life and career roles in terms of future personal-life/career projects (Di Fabio & Tsuda, 2018). Specifically, multiple subjective forms of identity refer to the individual roles that the person assumes and that, as a result, influence their life and career plans (Guichard, 2009). Self-awareness and environmental awareness contribute to the ability to manage complex problems and decisions, by which the individual is called upon to respond to personal needs based on personal and professional values, personal meaning and the life purpose he or she has identified. Furthermore, the concept of social responsibility highlights the awareness of personal responsibility towards society as a whole, while authentic values are linked to the construction of authentic meanings and the importance of purpose for individuals and societies. Finally, balancing life and career roles describes the harmonious and integrated integration of work and time outside of it, so that the individual can realize his/her potential in all areas of life in which he/she plays his/her own role.

The authors generated 38 novel items reflecting the aforementioned theoretical perspectives and operational definitions from the literature and through a small number of exploratory interviews with the intent to expand content coverage and create more items that are specific. The psychometric methods described in detail in the results section were employed in our

attempt to arrive into a shorter and consistent set of items. The factor structure of the Sustainable Career Development Scale (SCDS) was examined preliminarily through EFA (using principal axis factoring with Promax rotation) using a convenient sample of 207 participants, fulfilling the minimum limit of at least 5 observations per variable as Hair, Black, Babin and Anderson (2019) propose.

The study was conducted during April and September 2020 with 207 university students, 64,3% attending an undergraduate and 35,7% a postgraduate course. The sample included 46 male and 161 female participants, while their age average was 28 years. Regarding their employment status, 46,9% were working, while 53,1% were unemployed. Based on the Code of Conduct for Responsible Research issued by the [authors' home institution] in Greece, participants were informed about the purpose of the study and agreed to process their answers and publish the findings, anonymously. Upon written consent, the participants responded to the 38-item scale by indicating the extent to which they agreed or disagreed with each statement using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

To this regard, the aim of the present study is to examine whether the Sustainable Career Development Scale (SCDS) constitutes a reliable measure for assessing sustainability in career development, acknowledging the dynamic nature of life and careers. Additionally, we aimed at exploring whether participants' demographic data, namely gender, study level and employment status, correlate, at a statistical significant level, with the factors of the SCDS.

RESULTS

As stated above, EFA was used to determine the underlying factor structure. The Kaiser-Meyer-Olkin (MSA) of sampling adequacy estimate for the data set was 0.89, indicating a meritorious measure that the proportion of variance of items caused by the underlying factors is significant. The Bartlett's Test of Sphericity on the other side showed a significant result ($X^2(703) = 3196$, $p\text{-value} < 0.001$), indicating that the variables do relate to one another enough for running a meaningful EFA (Field, 2009). According to Field (2009), this indicates that the 38 items correlated sufficiently well with the extracted factors. Parallel analysis (Hair et al., 2019) extracted three factors with eigen values larger than the 95th percentile which may be used as a more conservative threshold that the mean value from the 38 items in the Sustainable Career Development Scale (SCDS). Parallel analysis findings of the first six components are shown in table 1.

Table 1: Parallel Analysis.

Component	EigenValue	Mean	95th Percentile
1	10.951375	1.92399	2.036572
2	2.659502	1.80654	1.882474
3	1.880322	1.719344	1.789812
4	1.515974	1.646327	1.710521
5	1.329408	1.580011	1.635377
6	1.278984	1.521053	1.571964

Common factor analysis was preferred over principal component analysis as the purpose was to identify underlying factors and not reduce factors to a minimum number for prediction purposes. Factor loadings were estimated using principal axis factoring extraction, since multivariate normality is violated and Promax rotation method, as oblique methods are best suited since few constructs in real world are zero correlated. Twelve out of the thirty-eight items with factor loading below .40 were eliminated, plus one item with cross-loadings on at least two factors with a difference lower than 0.2, yielding a measure of 25 items (table 2).

Table 2. Exploratory Factor Analysis Results (Principal Axis Factoring Extraction, Promax Rotation) for the Sustainable Career Development Scale.

Factors and Item Loadings			
Promax rotation, 25 items, N=207	Percentage of variance explained		
	27.17 F1	8.7 F2	3.3 F3
Q14 I am aware of the importance of career management skills in my interaction with the environment.	.756	.017	-.255
Q22 I am personally accountable for acquiring and continually renewing my career management skills.	.618	-.195	.108
Q21 I believe that I gain immaterial benefits from my career planning.	.603	-.101	.139
Q31 I work hard to make my long-term goals come true, even when unexpected events occur.	.601	.178	-.165
Q18 I devote a lot of my time in my career.	.586	.139	-.063
Q30 I am constantly engaged with new learning models and knowledge content.	.555	.199	-.073
Q17 I am continuously informed about the new technological developments of my field.	.528	-.024	.041
Q5 I realise that switching between my multiple roles is associated with my ability to adapt to ever-changing conditions.	.520	.244	-.182
Q11 I am willing to manage my career transitions.	.514	-.165	.171
Q29 I dedicate myself to the execution of my professional plans.	.474	.075	.185
Q2 I keep myself informed about labor market developments.	.417	.126	-.005
Q37 I know how to use up-to-date, valid and reliable sources of professional information for my career management.	.414	.070	.147
Q32 It is clear to me what I want to become in the future.	-.184	.920	.006
Q15 I am well aware of my career plans.	.002	.798	-.104
Q38 I have a clear picture of my future goals and objectives.	.102	.748	-.019
Q35 I know what I want to become in my life.	-.260	.706	.315
Q25 I am aware of how I will plan my career in order to give meaning, direction and purpose in my life.	.189	.544	.011
Q23 I know myself very well.	-.108	-.003	.761

Q26 I am aware of my feelings.		-.099	.083	.641
Q27 I understand the values of my life.		.022	-.078	.576
Q1 I can identify my strengths and weaknesses.		-.050	.059	.569
Q16 I am well aware of the priorities in my life.		-.009	.122	.494
Q6 I can easily manage my own needs.		.105	.086	.489
Q28 I can distinguish the multiple roles I take on in my life.		-.058	.145	.484
Q34 I can describe who I am.		.240	-.027	.478
Key: F1= Life / Career Management, F2= Future Life/Career Projects F3= Identity Awareness,	Internal consistency (Cronbach's α) estimates	.86	.86	.81
Note: Correlation estimates between factors: F1-F2: .45, F1-F3: .52, F2-F3: .51				

A three-factor solution, accounting for approximately 36,19% of the total variance was found and satisfied all psychometric and theoretical criteria set up to this point. The first factor, *life/career management* represents the individual's ability to navigate and effectively manage his/her life/career. This factor consists of twelve items and accounts for 27,17% of the total variance and has a Cronbach's Alpha coefficient of .86. The second factor, *future life/career projects*, comprises of five items that mainly refer to self-awareness in terms of feelings, values, needs, strengths and weaknesses, as well as of the individual's roles and priorities in life (5,7% of the total variance is explained by this factor) and has a Cronbach's Alpha coefficient of .86. The third factor, *identity awareness*, represents individual's ability to identify his/her future life/career plans; the factor is formed by eight items and accounts for 3,3% of the total variance and has a Cronbach's Alpha coefficient of .81.

Shapiro-Wilk tests revealed that only *life/career management* was normally distributed (p -value > .05). This was not the case for both *future life/career projects* (p -value < .05) and *identity awareness* (p -value < .05). By using t-tests or Mann-Whitney U analyses, depending on normality violation rule, we compared respectively the mean score or median differences for all three dimensions across gender, study level and employment status. T-test revealed no significant mean difference for *life/career management* ($t = -1.23$, p -value > .05) between men ($M = 45.45$) and women ($M = 46.70$).

Regarding the level of studies, students with an undergraduate level of studies ($M = 45.05$) scored significantly lower ($t = -4.59$, p -value < .001) in the *life/career management* factor, than students with a postgraduate level of studies ($M = 48.89$). Additionally, as far as the employment status is concerned, employed students ($M = 48.43$) scored significantly higher ($t = 4.79$, p -value < .001) in the *life/career management* factor, than students who are unemployed ($M = 44.65$).

The Mann-Whitney U test revealed no significant median difference for *future life/career projects* ($U = 3,685$, p -value > .05) between men ($Mdn = 20$) and women ($Mdn = 20$). In relation to the level of studies, students with an undergraduate level of studies ($Mdn = 19$) scored significantly lower ($U = 5,782.5$, p -value < .05) in the *future life/career projects* factor, than students with a postgraduate level of studies ($Mdn = 20$). Moreover, the employed students

($Mdn = 20$) scored significantly higher ($U = 4,202.5$, $p\text{-value} < .01$) in the *future life/career projects* factor, than students who are not employed ($Mdn = 19$).

Mann-Whitney U test revealed no significant median difference for *identity awareness* ($U = 3,737$, $p\text{-value} > .05$) between men ($Mdn = 33$) and women ($Mdn = 33$). However, students with an undergraduate level of studies ($Mdn = 32$) scored significantly lower ($U = 5,831.5$, $p\text{-value} < .05$) in the *identity awareness* factor, than students with a postgraduate level of studies ($Mdn = 33$). Finally, the employed students ($Mdn = 33$) scored significantly higher ($U = 4,196.5$, $p\text{-value} < .01$) in the *identity awareness* factor, than the unemployed students ($Mdn = 32$).

DISCUSSION

The results of the factorial structure are in line with our theoretical assumption and indicate that the SCD constitutes a higher order construct that contains three dimensions: life/career management, future life/career projects and identity awareness. The reliability of the scale was highly satisfactory and this is an initial, good indication of its suitability for use in future surveys. From a practical point of view, the Sustainable Career Development Scale is easy to use, short, has good psychometric properties and provides more information for developing a planning attitude that includes both learning about oneself and taking practical initiatives to plan and explore career paths.

Therefore, future research should expand the study of these variables to participants from different geographical areas. In addition, the authors believe that future research needs to cross-examine the current factor structure through CFA designs for other groups as well. Another interesting future research undertaking would be to further explore the relationship of sustainable career development with work orientations, considering the interplay and exploring their potential correlation. Nevertheless, despite these limitations and the need for further research, the results indicate that career development specialists and guidance practitioners may need to increasingly consider the broad array of personal resources that are needed for individuals to cope and successfully manage their life/career challenges.

The findings can be also associated with a primary prevention perspective in the field of career development, by emphasizing the importance of developing individual's strengths across the life course before the onset of difficulties (Di Fabio & Kenny, 2018). In that sense, career counselors and guidance practitioners could endorse interventions that enhance not only the personal and career development and well-being of individuals but also equip them with strengths to explore and define their personal meaning of what constitutes sustainable career development for themselves.

Implications for Practice

Social Cognitive Career Model

The Social Cognitive Career Model (Lent, Brown, & Hackett, 1994) based on Bandura's (1997) theory and self-efficacy may provide one of the most appropriate models that helps to shape sustainable career development. According to this model, individual and environmental factors (opportunity structure, interpersonal relationships with significant others) exert, through learning experiences, a significant influence on the formation of individuals' perceptions of self-efficacy and their associated expectations. These perceptions, in turn, influence in a direct and indirect way the formation of their interests, their goals and the actions to achieve them

(content of educational and professional decisions) and their subsequent performance, thus providing a continuous and dynamic feedback to their socio-cognitive system. For example, career information activities about studies, professions and the labour market, identifying educational or professional goals, problem solving, decision making and career planning affect the individual's cognitive process, as this information is filtered by the individual until it is finally determined what weight will be given to it and how it will eventually be incorporated into self-efficacy beliefs (Charokopaki, 2019).

In a similar way, the development of career education programmes, entrepreneurship, volunteer work, the organization and implementation of field activities directly linked to the real world of work and even the use of digital resources can contribute in an effective way to the sustainable career model. These actions respect the environment and promote social justice and equal opportunities for all, making use of natural, economic, social or cultural resources available in the community (e.g. in the local community). In this way, adolescents themselves become important partners in their own career development, while at the same time being able to use their acquired competences, skills and knowledge to contribute to the development and management of their careers. In this way, people can become co-determinants in the environment and situations that influence their interests, goals and actions for career realization (Charokopaki & Argyropoulou, 2019).

Narrative approaches in career counselling

The dissemination of narrative approaches in career counselling is gaining ground in addressing contemporary challenges, as it introduces methods of counselling intervention that can reveal not only the individual's goals, personal values and beliefs, but also the individual's overall perception of himself or herself and his or her role in an era of constant change. As narrative approaches take a holistic approach to careers considering them an integral part of the individual's overall life, counsellors, through storytelling can empower sustainable career development by creating new meanings in people's professional lives and shaping authentic actions to realise goals in their professional development. In such a context, life planning interventions (Savickas et al., 2009) that emphasize reflection and reflexivity shape a different perspective, through which the individual envisions his/her action and "builds" the next chapter of his/her personal story, enhancing future planning, harmonization with the environment, personal and professional development and sustainable career development (Argyropoulou, Mouratoglou, Mikedaki, Kaliris, Papatheodorou, 2020).

Life and Career Management Skills

The innovation of sustainable career development lies in the fact that it provides a proactive framework for educational and counselling interventions, which seeks to develop a "core" of skills that, in turn, enable people to engage in the development and progression of their lives and careers, knowing both their strengths and weaknesses. The use of career management skills can help adolescents, young people and adults to develop as individuals (personal level), as members of the labour market (work level) and as members of the wider society (social level) their skills and competences identifying what constitutes sustainable career development (Argyropoulou & Lorentzos, 2021). Thus, the cultivation of career management skills could encourage individuals' active engagement in career development and progression, providing a dynamic balance between the individual and the environment over time and

enhancing the maintenance of psychological well-being through the use of personal resources (Argyropoulou & Kaliris, 2018).

CONCLUSION

In line with the post-modern perspectives that have been articulated through the last decades in career guidance and counseling, we think that the aspects of sustainable career development have an added value to the science of counselling and career guidance, since they support the perspective of primary prevention and the development of personal strengths throughout the life of the individual. As such, sustainable career development can provide a promising framework for preparing adolescents, young people and adults to deal effectively with their careers and their lives, maintaining their personal well-being in these difficult times and, at the same time, contributing to their social harmonization. Therefore, the conceptual construct of sustainable career development seems to represent a personal resource aligned with the 17 UNESCO Sustainable Development Goals, and this construct can be cultivated through specific counselling interventions to mobilize mechanisms that broaden the way individuals see themselves and the world and lead to more psychological well-being.

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