

# Promoting Sustainability and Reflexivity in the Career of Greek University Students

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## Abstract

This paper aims at highlighting a grid of personal resources, which can help university students effectively respond to the complexity of labor market and career development, namely sustainability and reflexivity (life project reflexivity). Given that so far little is known regarding the degree to which higher education students possess and develop such resources, a cross-sectional survey was conducted to investigate: 1) students' perceived level of the aforementioned resources, 2) the relationships that may exist among them, and 3) possible differences in resource levels between working and non-working students. Results demonstrated relatively high scores in the two personal resources, strong positive relationships between sustainability and reflexivity (life project reflexivity) as well as significant differences in scores concerning the university students' work status. Implications for career counseling interventions and further research are provided.

## Keywords

Higher Education, Personal Resources, Sustainable Career Development, Sustainable Career Development Scale, Reflexivity, Life Project Reflexivity

## 1. Introduction

The volatile nature of today's societies in relation to systemic shocks and the COVID-19 pandemic put a multi-layered pressure on individuals, who are constantly required to construct and reconstruct aspects of their careers in order to be functional in the unpredictable world of work (Blustein, Duffy, Ferreira, Cohen-Scali, Cinamon, & Allan, 2020). Millions of workers are facing sudden and unexpected job loss while millions more are adjusting to the "new normal" of working in isolation (Noguchi, 2020). Although the nature of COVID-19 impacts may vary, we anticipate that few workers will escape this pandemic without

radical changes to their vocational landscape. Thereby, terms such as change, transition, complexity, uncertainty, adaptation, reflexivity and sustainability are becoming increasingly important, weakening, respectively, terms such as linearity, security, certainty and stability. This type of career, in which employees must take responsibility for their employability, is becoming more dominant in the labor market (Vuori, Toppinen-Tanner, & Mutanen, 2011), with employees designing and actualizing self and career construction and, in doing so, demonstrating their ability to cope with the increasing fluidity in the workplace and move forward (Di Fabio & Maree, 2016). According to this concept, career counseling seeks to manage the issue of career in the light of: 1) the self-directed and flexible career development; 2) the engagement in self-directed career management over the entire lifespan; 3) the creation of a sense of meaning and identity in the work role despite nonstandard work arrangements (Hirschi, 2018); and 4) the sustainable career development in order for a person to contribute in this way to their personal and professional life but also, to a better world in a broader sense (Argyropoulou, 2021a). Thus, career issues are becoming more substantial, as they cannot be considered separately from personal issues (Guichard, 2018) where recognition and presence of reflective behaviors underpin the important role of reflection in the career construction of future projects (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2013).

Against this background, the emphasis on career counseling and the study of vocational behavior has shifted from guiding and counseling to a career development that enables individuals to manage their careers and their lives (Savickas, 2013). Thus, the main challenge for vocational researchers and practitioners is to devote much attention in sustainable career-management (Blustein, Kenny, Autin, & Duffy, 2019) in order to encourage young people to deal with their career development and respond with clarity and authentic aspects of the self to the considerable challenges (and opportunities) that global crises bring to the contemporary world of work (Di Fabio, Maree, & Kenny, 2018). Young people confront many challenges in their career design due to the threat of environmental problems and self-knowledge or career information is not enough to help them construct their career paths. This process should optimally assist individuals in consciously identifying the part of the world of work that fits their own professional identity and career in order to advance their personal and professional lives and ultimately their well-being (Argyropoulou & Kaliris, 2018). In the current study, research is being conducted regarding sustainability and reflexivity in the career of University students.

## 2. Literature Review

### 2.1. Sustainable Career Development

The field of sustainability serves the goals of sustainable development (United Nations, 2021), which are in tandem with contemporary global challenges, and are considered particularly important in order for someone to achieve a better

quality of life on the planet. Previous studies have focused predominantly on the psychology of sustainability and sustainable development suggesting the value of psychological science in enriching the transdisciplinary field of sustainability science (Di Fabio & Rosen, 2018). In this regard, Di Fabio and Tsuda (2018) emphasize the importance of sustainability as a central component of human wellbeing and quality of life considering different kinds of environments (i.e. from nature through/to individuals, communities, organizations, societies...to the virtual environment and the global environment). In this context, the research on sustainable careers is still growing, as the notion of sustainability in relation to career has recently been formulated and reflects three features. Firstly, providing opportunities for renewal, as people may pause in order to rejuvenate, and secondly, being flexible and adaptable, as their current knowledge and skills soon will soon be out of date (De Vos, Dujardin, Gielens, & Meyers, 2016). Furthermore, sustainable careers include time, social space, agency, and meaning integrating the individual's opportunities and experiences across life spheres and creating a sense of wholeness and completeness for individuals and societies (Argyropoulou & Mouratoglou, 2021; Newman, 2011). Thus, as de Lange, Kooij and Van der Heijden (2015) underline, in the framework of sustainable development and decent work sustainability in career seems to have beneficial effects on personal development, well-being and health, fulfilling three innate psychological needs: autonomy, personal competence and harmony with the environment.

Given the centrality of career self-management skills to career counseling and career design research and practice, we proposed the concept of sustainable career development (Argyropoulou, Mouratoglou, Antoniou, Mikedaki, & Charokopaki, 2020) in order to denote a dynamic, continuous, reflective process of: 1) enhancing the harmonization between individual SIFs (Guichard, 2009); 2) encouraging individual personal growth and effective adaptability in liquid contexts (Savickas, 2015); 3) enhancing their social responsibility and authentic values (Di Fabio, Maree, & Kenny, 2018), and 4) promoting balance between life and career roles in terms of their future personal-career-life projects. More 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. Self-awareness and environmental awareness contribute to the ability to manage complex problems and decisions, with which the individual is called to respond to their personal needs based on personal and professional values, the personal meaning and the life purpose they have identified for themselves. 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 comprehensive integration of work and the time outside of work, so that the individual can realize their potential in all areas of life in which they play their own role (Argyropoulou, 2021a).

This notion changing the career counseling approach emphasizes the need to guide clients to seek maximizing their potential and participate 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 (Blustein, 2011). Therefore, career counseling can play a catalytic role in enabling young people to engage in the development and progression of their lives and careers, and to develop as individuals (personal level), as members of the labor market (work level) and as members of the wider society (social level) (Argyropoulou & Lorentzos, 2021).

Recognizing the key role of sustainable career development, the SCDS was developed (Mouratoglou, Argyropoulou, & Charokopaki, 2022; Argyropoulou, 2022) in order to provide a promising framework in career counseling in terms of preparing young people to effectively deal 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. The SCDS was developed with a sample of 207 Greek university students. The initial 38-item instrument was analyzed through exploratory factor analysis (EFA), yielding a three-factor structure that included 25 items. The three-factor subscales were labeled as life/career management (represents the individual's ability to navigate and effectively manage his/her life/career), future life/career projects (refers to self-awareness in terms of feelings, values, needs, strengths and weaknesses, as well as of the individual's roles and priorities in life) and identity awareness (represents individual's ability to identify his/her future life/career plans) and were viewed as generally consistent with theoretical expectations. The three-factor scales demonstrated adequate internal consistency reliability, ranging from .81 to .86, with a coefficient  $\alpha$  of .88 for the total SCDS. While the need for an assessment tool like the SCDS is clear and the results of the factor analysis are promising, further research is needed to gather further evidence to support the reliability and validity of the SCDS. The current study seeks to verify its construct validity based on correlations with the Greek version of Life Project Reflexivity Scale (LPRS) (Di Fabio, Maree, & Kenny, 2018).

## 2.2. Reflexivity in the Career

Savickas (2011) emphasizes the importance of reflection and reflexivity as central components of career counseling intervention. Although reflection refers to thinking about something that has happened, reflexivity describes people's capacity to reflect on and take the steps needed to tackle current and future work and life projects. Reflexivity is an active and continuous process through which individuals reach self-awareness by balancing aspects of one's present, past, and future (Di Fabio & Maree, 2016). Therefore, in order for individuals to find meaning in their lives, they are encouraged to unify their present situation from

a desired future perspective (what they want to become) based on reflexivity. This implies that individual identity is dynamic and constantly changing as a result of managing change or taking on different roles in various aspects of life and career (Guichard, 2009). In this respect, individual identities can be associated with different career choices while reflexivity could encourage a person to consciously identify which part of the world of work fits his/her own professional identity and career (Kassotakis, 2014). Although information processing is very important for career choices and career development, reflexivity emphasizes, in addition, the importance of people's interaction with their context, identity development, or meaning of life and work (Busacca & Rehfuß, 2017). Thus, reflexivity enables the individual to move beyond the deep, serious thoughts of a reflection to a new perspective, through which he/she will acknowledge the process of transition and change, clarify priorities and envision a future by drawing on his/her authentic values, life purposes and essential aspects of professional personality (Bangali & Guichard, 2012). In light of this, reflexivity affects the way we think in our personal and professional lives. These challenges may be tackled through career counselors by developing advanced counseling interventions that assist clients in defining who and what they want to become in their work and, more broadly, across their lives (Savickas, 2015).

The notion of career management through self-management then emphasizes the importance of strengthening many aspects of self, including building reflexivity in order to adapt to changes in one's career and life pathways. Against this background, the development of self and reflexivity are central processes, which help individuals expand self-awareness and attribute meaning to their life experiences. Thus, the main challenge in career counseling is to enable young people to create personal meaning, define future objectives, and construct a future self with purpose and authenticity for their career (EOPPEP, 2020). This assumption reflects the importance of building individual resources and strengths, not only as protective factors for coping with a challenge, but as resources that allow youth to fully thrive and meaningfully contribute to society (Di Fabio & Kenny, 2016).

Young people now require a set of flexible career management and self-management skills to gain insight or reflexivity about themselves and their environments and to successfully navigate their increasingly unpredictable and chaotic career paths. Therefore, considering the multiple career-related challenges which arise for higher education students, both during and after graduation, it is self-evident how important it is to help them develop psychological resources as a way for them to successfully deal with transitions, such as that from University to work, to reach specific academic and career goals, to enhance their employability rates and finally, to be successful both at work and in life (Sidiropoulou-Dimakakou, Argyropoulou, Drosos, Kaliris, & Mikedaki, 2015). Next, sustainable career development and reflexivity in the career will be highlighted as they represent resources with great potential for the facilitation of higher education students' career development. Higher education can attract and retain

high-quality students (Hewitt-Dundas & Roper, 2018) and train high-quality graduates to meet the growing demand for building active and meaningful careers and to participate meaningfully in society. Thus, it should be a trend for universities to offer “additional” modules as part of degree programs, focusing on the development of “core competencies” in areas such as sustainability and reflexivity in the career

In alignment with the review above, the LPRS was developed (Di Fabio, Maree, & Kenny, 2018) to assess people’s reflexivity regarding their future career-life projects as a tool for designing and assessing interventions in career counseling and life design. The three-factor subscales were labeled as clarity/projectuality, AU, and acquiescence and demonstrated adequate internal consistency reliability, ranging from .77 to .80, with a coefficient  $\alpha$  of .81 for the total LPRS. The adaptation of LPRS to Greek University students shows (Argyropoulou, Antoniou, Mouratoglou, Charokopaki, & Mikedaki, 2020) that the scale is a multidimensional construct composed of the three above dimensions which expands the cross-national measurement equivalence of this scale.

### 3. Scope and Research Hypotheses

In a multidisciplinary framework, we attempt to investigate the relationships that occur among as reflexivity contributes to the development of life/career projects while sustainable career development highlights the individual’s dynamic interaction with the environment in such a way that he/she self-regulates and evolves. Furthermore, the differences among undergraduate and postgraduate students such as the level of reflexivity and sustainability in career between working and non-working students are points of interest in the survey. There is a gap in the existing literature which we intended to fill through this study.

Specifically we wish to investigate:

To what extent is there a connection between sustainable career development and reflexivity in career?

How reflexivity in career is affected by demographic variables?

How sustainable career is affected by demographic variables?

How sustainable career development could affect reflexivity in career?

How reflexivity in career could affect sustainable career development?

What relationship is created between the two variables?

## 4. Methodology

### 4.1. Participants

The sample of the study consisted of 170 undergraduate (Bachelor) and postgraduate (Master) students of the Department of Educational Studies of the University of Athens, Greece from whom 74 (43.5%) were males and 96 (56.5%) were females. The female over-representation is partly a result of the type of studies. Common obligatory subjects for all students are Ancient Greek, Philosophy, Theory and Methodology of Teaching, Educational Assessment, Career

Guidance, Educational Psychology etc. Most students of the sample were between 20 - 25 years old. The majority of them were undergraduate students ( $n = 110$ , 65.3%) where the others ( $n = 60$ , 34.7%) were postgraduate students. From the total sample, 73 (42.9%) declared they had occupational experience as compared with those who declared that they had not ( $n = 97$ , 57.1%).

## 4.2. Instrumentation

For the data collection were employed:

*Sustainable Career Development Scale* (SCDS; Argyropoulou, 2021a; Mouratoglou, Argyropoulou, & Charokopaki, 2022) was used to explore the level of participants in sustainability in career. The 25-item scale has reached adequate psychometric properties in study with adults ( $N = 207$ ). Three dimensions were supported by exploratory and confirmatory factor analyses. *Life/career management*: consists of twelve items and represents the individual's ability to navigate and effectively manage his/her life/career (e.g. "I am aware of the importance of career management skills in my interaction with the environment"); *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 (e.g. "I have a clear picture of my future goals and objectives"); *identity awareness*: is formed by eight items and represents individual's ability to identify his/her future, life/career plans (e.g. "I can identify my strengths and weaknesses"). Items are scored on a 5-point Likert-type scale in which participants responded to each item employing a 5-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). Alpha estimates in this sample were high for the total scale ( $\alpha = .92$ ) as well as for the sub-scales (.86, .82, .82) respectively.

*Life Project Reflexivity Scale*. The adjusted Greek form (Argyropoulou, Antoniou, Mouratoglou, Charokopaki, & Mikedaki, 2020) of the Life Project Reflexivity Scale (LRS; Di Fabio, Maree, & Kenny, 2018) was used to indicate individuals' reflexivity in relation to future projects across career, personal, and life domains. The LPRS consists of 15 items with a response format on a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree. The scale has three dimensions: *Clarity/Projectuality* (e.g. "The projects for my future life are clearly defined"); *Authenticity* (e.g. "The projects for my future life are full of meaning for me"); *Acquiescence* (e.g. "The projects for my future life are more anchored by the values of the society in which I live than my most authentic values"). The Cronbach's alpha coefficients for the Greek version of the three dimensions were: Authenticity (.80), Acquiescence (.87), Clarity/Projectuality (.83), and LPRS total (.75). In the present research Cronbach's  $\alpha$  was high ( $\alpha = .81$ ) as well as for the sub-scales (.87, .86, .87) respectively.

*Demographics*. A questionnaire was employed to gather data on students' gender, age, type of studies and status of employment (distinguishing between working and non-working students).



### 4.3. Procedure

A cross-sectional survey was carried out from April to June 2021 at the Department of Educational Studies of the National and Kapodistrian University of Athens. Cluster sampling was applied as participants represented entire classes. Questionnaires were completed during a regular class. Participants were initially informed orally about the study. Specifically, they received information about the purpose and the content of the study, as well as about the measures that would be administered. No award was given for participation in the study. Participants were assured that anonymity and confidentiality would be maintained throughout all the research stages. The research adhered to the ethical requirements stipulated in the Code of Conduct for responsible research issued by the National and Kapodistrian University of Athens in Greece.

### 4.4. Data Analysis

SPSS version 25.0 was used to analyze data. Normality of data distribution was confirmed as the quotients of kurtosis and skewness with their corresponding standard errors were less than the number 3.29 (Roussos & Efstathiou, 2008). The reliability of Sustainable Career Development Scale (SCDS) and Greek Life Project Reflexivity Scale (LPRS) was verified using Cronbach's alpha coefficient. Descriptive statistics (means, standard deviations) were computed for all scales as well as ANOVA and t-test in order to examine differences in skill levels between working and non-working students.

## 5. Findings-Results

### 5.1. Descriptive Statistics and Correlations among SCDS and LRS

The correlations, means and standard deviations for the study variables are provided in **Table 1**.

Concerning sustainable career development levels, the highest score appeared at the dimension of identity awareness ( $M = 4.04$ ,  $SD = .53$ ). Relatively high scores were also found for reflexivity in career at the component of acquiescence ( $M = 3.98$ ,  $SD = .67$ ). Finally, score on authenticity of reflexivity was the lowest of all resources ( $M = 3.24$ ,  $SD = .81$ ).

**Table 1.** Descriptive statistics and correlations among SCDS and LRS.

Variable	1	2	3	4	5	6	<i>M</i>	<i>SD</i>
1. Life/career management	-	.678***	.731***	.735***	.011	.524***	3.77	.55
2. Future life/career projects		-	.640***	.632***	.020	.701***	3.76	.70
3. Identity awareness			-	.648***	.019	.506***	4.04	.53
4. AU				-	.104	.426***	3.24	.81
5. Acquiescence					-	-.107	3.98	.67
6. Clarity/projectuality							3.58	.80

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



Moderate to high positive correlations occurred among most variables at the .01 level of significance. An overview of **Table 1** shows that there is a high positive relationship between life/career management and authenticity ( $r = .73$ ), future life/career projects and clarity/projectuality ( $r = .70$ ) and a moderate relationship between identity awareness and clarity/projectuality ( $r = .50$ ). No significant relationships were found between sustainable career development and reflexivity in career and participants' age.

## 5.2. Gender, Level of University Studies, Working Status and SCDS/LPRS Dimensions

To find out whether Greek SCDS and LPRS scores differed significantly between male and female students, undergraduate (Bachelor) and postgraduate (Master) students and working and non-working students of the sample, two-tailed t test comparisons were applied. The results of the comparisons indicate that the differences in the mean scores of male and female students are not statistically significant in relation to the three dimensions of SCDS; namely, life/career management, future life/career projects and identity awareness such as LPRS; namely, authenticity, acquiescence and clarity/projectuality. In addition, no statistical significance was found between undergraduate (Bachelor) and postgraduate (Master) students for Greek SCDS and LPRS scores. However, there is a statistically significant difference ( $p = .00$ ,  $p < .05$ ) between working and non-working students of the sample and the SCDS dimension life/career management (**Table 2**). Similarly, there is a statistically significant difference ( $p = .00$ ,  $p < .05$ ) concerning the working status and the LPRS dimension of clarity/projectuality (**Table 3**). Specifically, working students have a higher mean score in comparison with the non-working students, navigating and effectively managing their life and career ( $M_{\text{working}} = 3.89$ ,  $M_{\text{non-working}} = 3.69$ ,  $t(168) = 2.31$ ,  $p < .01$ ). Finally, working students have a higher mean score in comparison with the non-working students, indicating that they have more clarity in their future goals ( $M_{\text{working}} = 3.45$ ,  $M_{\text{non-working}} = 3.07$ ,  $t(168) = 3.07$ ,  $p < .01$ ).

## 5.3. Linear Regression Analysis in Order to Make Predictions of the Dependent Variable with the Help of Independent Variables

Linear regression analysis was established to estimate the relationship (variability levels) between LRS and SCDS. Adjusted coefficient  $R^2$  (.69) demonstrated that the 69% of the overall effect on dependent variable SCDS is explained by the independent variables (Authenticity and Clarity/projectuality) of LRS. Analysis of variance (ANOVA) is a significant predictor of the forces generated ( $F = 189.35$ ,  $p < .001$ ) and revealed the significant predictor of Authenticity ( $\beta = .46$ ,  $p = .000$ ) and Clarity/projectuality ( $\beta = .23$ ,  $p = .000$ ) on SCDS (**Table 4**). Furthermore, linear regression analysis was used to assess the levels of variability of SCDS on LRS within a regression model. Adjusted coefficient  $R^2$  (.51) demonstrated that the 51% of the overall effect on dependent variable LPRS is explained by the

**Table 2.** Two-tailed t-test comparisons between the working (N = 73) and the non-working (N = 97) groups on the sustainable career development scale (SCDS).

LPRS Dimensions	Working status	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Life/career management	Working	3.89	.51	2.31	<.01
	Non-working	3.69	.57		
Future life/career projects	Working	3.88	.69	1.94	>.05
	Non-working	3.67	.70		
Identity awareness	Working	4.08	.48	.80	>.05
	Non-working	4.01	.56		

**Table 3.** Two-tailed t-test comparisons between the working (N = 73) and the non-working (N = 97) groups on the life project reflexivity scale (LPRS).

LPRS Dimensions	Working status	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Authenticity	Working	3.19	.64	-.21	>.05
	Non-working	4.01	.70		
Acquiescence	Working	3.50	.80	-1.11	>.05
	Non-working	3.64	.80		
Clarity/projectuality	Working	3.45	.85	3.07	<.01
	Non-working	3.07	.74		

**Table 4.** Linear regression model for the effect of sustainable career development on reflexivity.

Prediction Variables	Model 1		
	<i>B</i>	SE <i>B</i>	$\beta$
(SCDS)	1.23***	.13	
Authenticity	.46***	.03	.60
Clarity/projectuality	.23***	.03	.36
R <sup>2</sup>		.694***	
F		189.35***	

**Table 5.** Linear regression model for the effect of reflexivity on sustainable career development.

Prediction Variables	Model 2		
	<i>B</i>	SE <i>B</i>	$\beta$
(LPR)	1.17***	.20	
Life/career management	.20**	.07	.23
Future life/career projects	.31***	.05	.44
Identity awareness	.11	.07	.12
R <sup>2</sup>		.514***	
F		60.62***	

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

independent variables (Life/career management, Future life/career projects, Identity awareness) of SCDS. Analysis of variance (ANOVA) is a significant predictor of the forces generated ( $F = 60.62, p < .001$ ). Life/career management revealed a significant predictor ( $\beta = .20, p = .007$ ) for LRS such as the dimension future life/career projects ( $\beta = .31, p = .000$ ). However, identity awareness ( $p = .124$ ) does not predict LRS (Table 5).

## 6. Discussion-Conclusion

This study was carried out to explore the relationships that occur between sustainable career development and reflexivity in the career within a population of Greek university students. Significant positive correlations were found between the subscales of LPRS with the subscales of SCDS [(life/career management and authenticity  $r = .73, p < .01$ ), (future life/career projects and clarity/projectuality,  $r = .70, p < .01$ )]. In accordance with this result, these strong correlations confirm, initially, the suggestion of Argyropoulou (2021b) that sustainable career development denotes a dynamic, continuous, reflective process between the individual, their environment and their career issues. In a similar way, the correlation between life/career management of SCDS and authenticity of LRS suggests that an individual's ability to manage their life/career is aligned with authentic values and meaning as a foundation for future projects (Di Fabio, Maree, & Kenny, 2018). Furthermore, the correlation between future life/career projects of SCDS and clarity/projectuality of LRS refers both to self-awareness and the individual's roles as well as to the pursuit of future goals (Argyropoulou, Antoniou, Mouratoglou, Charokopaki, & Mikedaki, 2020). Thus, improving reflexivity can support the individual in making his/her work (existing or future) meaningful in a sustainable dimension, by acknowledging personal meaning and purpose, as well as personal and authentic value/and individuals' dynamic interaction with their environment in a way that they self-regulate and evolve. This finding is in line with Tonkin et al. (2018) who claim that sustainability in career encompasses the benefits of wellbeing. Psychological wellbeing is seen as the full functioning of a person (Ryan & Deci, 2001). Students in higher education who are distinguished by sustainability and reflexivity in their career appreciate the new challenges in their studies that intrigue their cognition and knowledge (Nimmi et al., 2020).

In respect of gender comparisons, no statistically significant differences were found between males and females in relation to the three factors of SCDS and LPRS. This result can be interpreted by the fact that comprehension and development of sustainable career development and reflexivity in the career are not associated with gender, but rather with personal self-regulation sources (Mikedaki, 2015). The lack of statically significant differences can probably be explained by the similar living conditions of men and women in the Greek context; namely, they have a daily routine that has several common characteristics, and they act within the same socio-political context while, at the same time, they ex-

perience the health crisis of the covid pandemic and the corresponding career shocks to the same extent and with a similar approach. A potential interpretation of this finding should be sought both in individuals (personality traits) and in cultural elements linked with the general attitude of the Greeks towards career-related issues (Karavia, 2015).

Comparing the SCDS and LPRS mean scores of undergraduate and postgraduate students, no statistically significant difference was found. An interpretation of this finding is that the unpredictable and complex labor market in Greece forces undergraduate and postgraduate students to realize from a young age what constitutes sustainable career development and reflexivity in their career as well as understand the importance of using their personal and social resources in how they perceive their studies, lifelong learning and employability (Argyropoulou, Tsikoura, & Kaliris, 2017; Argyropoulou, Terzaki, & Charokopaki, 2021).

However, statistically significant differences were found between working and non-working students in relation to the factor of life/career management of SCDS and clarity/projectuality of LPRS. This finding supports that working students seem to know what they want to be in the next chapter of their lives and careers, i.e. what professional and personal roles they want to take on in the future, what personal and professional activities they expect to be involved in and what professional and personal goals they want to achieve. This result aligns with the multidimensional content of sustainable career development, which functions as an intra-organizational personal capital (Seok, Abd Hamid, & Ismail, 2019) that seeks to: 1) manage personal/career life, 2) promote identity awareness, and 3) develop future personal/career plans (Argyropoulou, Mouratoglou, Antoniou, Charokopaki, & Mikedaki, 2020).

According to regression analysis, reflexivity in the career predicts sustainable career development via authenticity and clarity/projectuality, while sustainable career development is also an influencing factor for reflexivity via the life/career management and the future life/career projects variables (Argyropoulou & Mouratoglou, 2021). This finding supports the importance of ongoing career development in order for individuals to remain active and effective despite uncertainty, fear and loss, which brought the difficulties and complexity of society and the global pandemic in career planning. However, an emerging sense of hope centers on sustainable career development as an opportunity to help the individual accept the ecological well-being that is associated with life and career (Plant, 2013), developing healthy coping strategies to manage their career (ILO, n.d.) and promoting their strengths and resources in their interaction with the environment (Argyropoulou & Kaliris, 2018). Through developing sustainability and reflexivity in the career, the output can help Greek University Students to adapt to the changing work environment, being more resilient and amenable to change.

### **Limitations-Suggestions**

This study was conducted at a Greek university. Further studies should be de-

veloped including various samples of adolescents, students, employed and unemployed people in relation to their career progress and development. Research in other countries could provide more robust evidence of construct validity of the sustainable career development scale. Additionally, future research aiming at further supporting the validity of SCDS should include convergent validity, providing additional data concerning its relations with self-efficacy in career, psychosocial strengths, and career decision-making profiles. Finally, it would be of great interest to examine the pandemic crisis impact on the Greek university students' sustainable career development dimensions since they develop their careers in a turbulent and challenging socioeconomic context.

Sustainable career development is a promising intervention that could potentially be used to assist clients in understanding a greater amount of information related to their career development and progress, forming a planning attitude that includes both self-learning and practical initiatives in exploring their career paths. Counseling interventions can play a catalytic role in fostering sustainable career development by cultivating personal resources and capabilities that will act not only as a protective factor for coping with career challenges (Guichard, 2013), but also as a promising core of resources for individual-environment interaction. It is noteworthy that the development of curricula should address the three dimensions of SCDS; life/career management, future life/career projects and identity awareness, in the educational setting. Indeed, developing career counseling programs in Geek University should then include a focus on the dimensions analyzed in the current study. Therefore, it seems more important for the students receiving higher education to help them learn and be able to reflect and criticize in order to cultivate talents who are adaptable, innovative and capable of leading sustainability in career. This is in line with the philosophy of university education (Pegg et al., 2012).

The challenge in the context of counseling interventions focuses on the exploration and identification of the personal meaning of the beneficiaries (i.e. university students), regarding what constitutes sustainable career development for them, as differentiating factors such as personal resources and strengths, target setting and motivation, individualize future life and career plans. Career counseling should support Greek University students find possible ways to use their personal resources for their future; sustainable career development and reflexivity in their career (life project reflexivity), so as to effectively prepare them for coping with the major challenges that humanity confronts today (Argyropoulou, Kaliris, Charokopaki, & Katsioula, 2021).

Thus, interventions definitely need development. Career counselors need to adopt the perspective of sustainable career development in their work by utilizing reflective and narrative approaches and techniques in order to strengthen the personal and professional identity of the individual, while taking into account the wider socio-economic context (Argyropoulou, Mouratoglou, Mikedaki, Kaliris, & Papatheodorou, 2020). In this way, the subjectivity of the individual is shielded, while ensuring that it is in conversation with the broader context in

which he/she operates. Therefore, it is recognized as a need (and a premise) that career counselors need to “construct themselves” as a viable project beforehand, in order to be able to support their clients in their own “self-construction” and promotion of their sustainable career development. Career counselors could highlight and convey the new perspective of sustainable career development in a dynamic, holistic, proactive and educational way.

Career counselor needs to improve their reflexivity, strengthen their psychological resources and cultivate them in order to contribute to their own positive personal and professional development. After all, we already know that counselors’ educational experiences must be continuous to be reviewed and adapted, in order to acquire the appropriate knowledge, conscientiousness and abilities to provide effective professional services counseling (Niles, Engels, & Lenz, 2009). Hence, career counselors need to adopt professional values and standards ethics in practice, develop and regulate appropriate relationships, engage in ongoing training and critical thinking, as well as supporting the (counseling) profession (Schiersmann et al., 2012).

### Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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