
Prospettive internazionali per l'orientamento e il career counseling: tra ricerca e pratica professionale nel 21° secolo

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Sommario

Questo articolo si propone di offrire nuove prospettive internazionali per l'orientamento e il *career counseling* per la ricerca e le pratiche professionali nel 21° secolo. Delineando l'evoluzione del costrutto e delle pratiche di orientamento fino alla fine del 20° secolo, il contributo presenta gli stadi dell'evoluzione dei costrutti e delle pratiche: il primo stadio, il passaggio dal primo al secondo stadio, i concetti del periodo che prepara il terzo stadio, fino al terzo stadio del 21° secolo, introducendo la necessità di un quarto paradigma per l'orientamento e il career counseling nel 21° secolo. Vengono delineate nuove prospettive per la ricerca e le pratiche professionali nel 21° secolo.

Parole chiave

Prospettive internazionali, Orientamento, Career counseling, Ricerca, Intervento, Pratiche professionali, 21° secolo.

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International Perspectives for Guidance and Career Counseling: Research and Professional Practice in the 21st Century

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Abstract

This contribution aims at offering international perspectives for guidance and *career counseling* for research and professional practices in the 21st century. Delineating the evolution of the construct and practices of guidance and career counseling up to the end of the 20th century, the contribution presents the stages of the evolution of the constructs and practices in the 21st century: the first stage, the transition from the first stage to the second stage, the concepts of the period that prepares the third one, up to the third stage of the 21st century, introducing the need for a fourth paradigm for guidance and career counseling in the 21st century. New perspectives are set out for research and professional practices in the 21st century.

Keywords

International perspectives, Guidance, Career counseling, Research, Intervention, Professional practices, 21st century.

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Introduction

The construct of guidance has been conceptualized since the beginning within a specific socio-economic and cultural context, assuming different meanings and related practices in different historical phases (Athanasou & Van Esbroeck, 2008; Athanasou & Pereira, 2020; Blustein et al., 2019; Di Fabio, 1998, 2009; Guglielmi & Chiesa, 2021; Guichard & Huteau, 2001; Gysbers, Heppner, & Johnston, 2009; Pombeni, 1997; Pombeni & Chiesa, 2009).

The term guidance implies orienting oneself with awareness of the cardinal points (Di Fabio, 1998), orient, in turn, derives from the Latin «oriens» for «east». The etymological root of career refers to car, chariot, careen (Savickas, 2006), as something that leads you and can be guided.

In this framework, the term «guidance» introduces a semantic ambivalence, reverberating in practice: the active form of the verb (*to guide*), implying a direct object (*to guide someone*), involves a directive attitude of the professional; the reflexive form of the verb (*to guide oneself*) implies both an active attitude of the person involved in the guidance process and a role of facilitator for the professional. In the first case, the professional guides the person who benefits from the intervention; in the second case, the person who benefits from the intervention is involved in a process of self-awareness and self-guidance facilitated by the professional. Let us continue with a brief historical excursus regarding the traditional phases of guidance, as reported by Di Fabio (1998, 2009). In primitive societies there is no trace of nor a need for real guidance processes: the transmission of knowledge and modus vivendi in relation to the natural and social environment was handed down by the elderly while learning took place by modelling processes.

In the period before the industrial revolution of the 18th and 19th centuries, the family played a critical role regarding aspects that would become part of guidance processes, even though in this perimeter we cannot refer to real guidance processes. The role of the elderly within the extended family was still there, as in primitive societies, to transmit knowledge relative to work. The family had the main role in both imparting skills to younger people and offering jobs to them: work was handed down from father to son. They were not guidance processes because a process of career choice was not involved: the more accessible activities were chosen over more congenial ones and there was an indiscriminate and chronologically early acceptance of any work activity if paid (the problem of child labour can be found).

Family was thus the culturally designated place for carrying out the functions of guiding young people in their careers and introducing them to the world of work. In this period, the figure of master craftsmen also emerged, they carried out professional-specific training and practical tests for young apprentices. These practices represent, on the one hand, an early embryonic form of guidance in

choosing a job, on the other hand we can recognize them as a primitive form of selection. Anyway, in this pre-industrial phase, there were no guidance interventions but only directive actions by those who held power (parents, elderly relatives and master craftsmen) towards young people.

In the 19th century, technological development and consequent industrialization processes introduced profound changes in society and in the model of socialization at work. The organization of work was modified, on the one hand, with a diversification of duties (division of labour) and roles (specialized manpower), on the other hand, with an increase in complexity in work organization. In this new scenario, the family turned out to be inadequate in offering young people professional preparation which could appropriately respond to these sudden changes in the production system and the demands that occurred.

On this basis, an initial interest emerged at a social level, which can be recognized as the birth of guidance in terms of theoretical constructs and intervention practices. So, from a private event in terms of the family economy, guidance became an issue of collective interest in terms of attention towards identifying the aptitudes of individuals in order to use them for the most suitable jobs. Guidance was addressed to making more profits through greater productivity for the benefit of industries and the economic system. The aptitudes of workers were traced in order to be put at the service of productivity and not in terms of facilitating the self-realization of the individual and mutual benefit.

Evolution of the construct and practices of guidance up to the end of the 20th century

The evolution of the construct of guidance, from its birth until the end of the 20th century, following Di Fabio (1998, 2009), can be summarized in the following five traditional phases: diagnostic-attitudinal, characterological-affective, clinical-dynamic, vocational development, and maturative-personal phases. For each phase, a chronological articulation will be presented, although we have to consider the mixing between one phase and another and the elements of innovation that precede and determine the birth of the subsequent phase. To facilitate the understanding of the salient features of each phase, both a motto summarizing the phase and a keyword in relation to the practices will be presented.

The first phase is the diagnostic-aptitudinal one (1900-1930), characterized by the motto «The right man in the right place» and the keyword «Matching» (Parsons, 1909; Lawe, 1929). On a theoretical level, this phase relies on aptitudes, or natural, hereditary dispositions based on the psychosensory components of individual performances. On an applicative level, this phase is focused on psychometric tests which identify the aptitudes of individuals for interacting with the

needs of various jobs. The aim of guidance is to determine the correspondence between the requirements of a particular job (previously investigated in terms of salient characteristics of its tasks) and individual aptitudes to be mapped.

The second phase is the characterological-affective one (1930-1950), with its motto «The right person is not only capable of doing things but also takes pleasure in doing them» and the keyword «Interest». It considers professional interest at the basis of productivity, not just aptitudes (Baumgarten, 1949). This phase is addressed to an increasing investigation of psychic dynamics and the character of individuals, including individual levels of participation, attention and curiosity, considered as being linked to greater productivity. This phase underlines the importance of the integration of knowledge of the individual character of the person as responsible for success and adaptation to study and work, and a psychometric approach continues to dominate practice. Tests and questionnaires to collect data are used, which are progressively directed towards interests and gradually orient towards interventions to reveal deeper aspects, such as inclinations.

The third phase is the clinical-dynamic one (1945-1960) with its motto «Work as a source of satisfaction» and the keyword «Motivations». It highlights the importance of motivations for career choice. Work is seen as an opportunity for the realization of individual deep-seated needs and therefore as a possible source of satisfaction for the person. Guidance interventions aim at bringing out the profound aspects of the person in relation to a good career choice capable of satisfying their personal needs. The concept of guidance is widened. At the forefront here are the internal dynamics of the individual (needs, conflicts, etc.) while in the background there are the needs of the labour market. There is a reversal of perspective: previously, we looked for concordance between characteristics of work and psychological characteristics of individuals whereas in this phase we start from the deep personality structures of individuals in searching to satisfy their deep-seated needs through work activities. Despite this advancement of perspective, in this phase too, as in the previous two, it is professionals who guide individuals and the individuals maintain a passive role.

The fourth phase is the vocational development one (1970s), with its motto «Professional choice as an implementation of one's self-image» and keywords «Developmental stages». It emphasizes the existence of stages in the evolution of career choice. The career choice is developed through overcoming these developmental stages and producing the career project, expressing the implementation of the self-image of the person (*Activation du Développement Vocational et Personnel*, ADVP, Pellettier, Noiseux, & Bujold, 1974; Super, 1957). The vocational sequence of the model related to this phase includes: tasks of exploration, crystallization, specification and implementation. For the first time there is a concept of an active individual, and for the guidance professionals a new role of helper.

The fifth phase is the maturative-personal one (until the 2000s), with its motto «Self-determination» and the keywords «Person as active agent». It emphasizes the centrality of the person who is active and capable of autonomous self-orientation, facilitating them in their awareness of the different levels of internal and external complexity. The guidance intervention is based on facilitating the individual's awareness in making decisions. This phase maximizes the advantages of the previous phase, conceiving the individual as the protagonist of the intervention and the professional as a facilitator for the emergence of new awareness in the person who benefits from the intervention. The 21st century will be addressed on the basis of the postulates of this phase of guidance, and individuals are considered entirely responsible for the route that their professional and personal lives will take (Guichard, 2013a; Savickas, 2011a). The rapid emergence of a new scenario characterized by growing instability, ever faster changes and continuous transitions will require new theoretical and intervention awareness.

The first stage of the 21st century

The first stage of the 21st century is characterized by new awareness related to changes in the world of work, as a consequence of the globalization of markets and the dizzying expansion of information technologies, which pose a series of questions on the validity of the career theories and techniques accepted so far. In the scenario of the current world of work, prospects are far from being certain and predictive because they appear characterized by irrepressible changes and constant transitions. Workers are called to continuously develop their skills, to accept flexibility, and create their own opportunities.

The life design paradigm (Savickas et al., 2009) was created to respond to this new 21st century scenario. It considers contextual opportunities, dynamic processes, types of non-linear progression, multiple realities and, finally, personal patterns, which are structured in a life-long, holistic, contextual and preventive way. At the basis of the life design paradigm (Savickas et al., 2009), these two theoretical pillars are traceable: the career construction theory (Savickas, 2001, 2005) and the self-construction theory (2004, 2005, 2009, 2010) which evolves into the life construction theory (Guichard, 2013a).

Career construction enlightens the interpretative and interpersonal processes through which individuals give meaning and direction to their vocational behaviours. It is guided by the following two questions: «What is the meaning of my professional career in my life?» and «How can I use my work role to express and develop my life story?». The theory emphasizes ways in which the individuals construct their career paths. Career construction tries to unify the present and to build the future through a reorganization of the past (Savickas, 2005, 2011).

Differently from this perspective but in a complementary way, the self-construction theory (Guichard, 2004, 2005, 2009, 2010) describes the construction of a person's life in various contexts and the processes that order these contexts. The evolution of the self-construction theory into the life construction theory (Guichard, 2013a) underlines that in post-modern scenarios individuals unify themselves by relating their various life experiences with narratives of their future, therefore making sense of their lives.

The self-construction and life construction theories imply these two main questions: «What in my life could give it meaning?», «What is the major anticipated subjective identity form capable of structuring the system?» (Guichard, 2009; Guichard et al., 2012). The theory is not centred on career construction — its purpose is broader because it includes aspects of construction of personal life and identitarian aspects. This theory tries to unify the present through the formation of future possibilities (Guichard, 2010). The importance of the aspired/anticipated subjective identity form that the individual desires to achieve is underlined as being full of meaning for constructing their possible future self.

Let us deepen our understanding of both Mark Savickas' theory and Jean Guichard's theory. The career construction theory (Savickas, 2005) underlines how individuals construct their careers by attributing meaning to their vocational behaviour and work experience (Savickas, 2005, 2011). The main construct in the theory is career adaptability, defined as the individual ability to foresee changes and envisage one's future in a constantly mutable context (Savickas, 1996, 2011a). Career adaptability includes four dimensions: concern (interest for one's own future), control (control/responsibility for one's own future), curiosity (curiosity for one's own future), and confidence (self-confidence in relation to one's own future).

On this basis, career counseling is configured as the process of self-construction, achieved through the creation of the self as a story (*storied self*), where the self is an internal compass for navigating transitions (Savickas, 2011a). Clients attribute personal meaning to past memories, present experiences and future aspirations, bringing these three aspects together into a life theme. The significance of these biographical themes enables clients to adapt to various transitions in their career (Savickas, 2011a).

The self-construction theory (Guichard, 2004, 2005, 2008, 2009) describes the construction of the life of an individual in various contexts and the processes that order these contexts. People are conceived as plural beings and with plural individual identities that form a dynamic system of subjective identity forms (SSIF). The subjective identity form (SIF, Guichard, 2010) represents each self that a person develops, interacting and having a dialogue with others in different particular settings, and living a specific life role. Within the system of subjective identity forms (SSIF), some subjective identity forms (SIFs) are more significant

than others and it is among these that the anticipated subjective identity form (ASIF) is generally generated.

Finally, two other valuable contributions offered respectively by Mark Savickas and Jean Guichard deserve to be mentioned.

Savickas (2011b) offered the characterization of guidance and career counseling interventions articulating them in vocational guidance, career education, and career counseling life designing. Vocational guidance is addressed to an object, is characterized by self-matching, implies an actor, is based on traits and requires resemblance. Career education is addressed to a subject, is characterized by self-implementing, implies an agent, is based on tasks and requires readiness. Career counseling life designing is addressed to a project, is characterized by a self-construction author, is based on themes and requires reflexivity.

Guichard (2013a) offered a precious taxonomy of interventions for the 21st century. This taxonomy distinguishes three different categories: information, guidance and dialogue interventions. At the outset, it is worth considering that these different types of interventions are placed on a continuum, where they are not exclusive of each other (Di Fabio, 2014b).

Information interventions aim to enable individuals to find meaningful and reliable information about the job market. The emphasis is placed on the attention by the professionals not to provide pre-digested and pre-established information but rather to facilitate the structuring and strengthening of critical skills of research and evaluation of complex information in those who benefit from the intervention.

Guidance interventions have their focus on the development of the person's employability, facilitating the construction of an adaptable vocational self-concept. For professionals, the emphasis is on the perimeter of facilitating in those who benefit from the intervention the adaptive acceptance of constraints and their possible transformation into opportunities.

Dialogue interventions have as their objective to help individuals build their authentic personal meanings, facilitating them in constructing their own lives. For this category, professionals are required to be prepared on specialist and current dialogic career counseling interventions, characterized by defined structures that require specific training (i.e., *Career Construction Interview*, Savickas, 2011a, 2014; *Life and Career Design Dialogues*, LCDD, Guichard et al., 2017; *Life Meaning Intervention*, Bernaud et al., 2015, 2016; *Constructing my Future Purposeful Life*, Di Fabio, 2014b) to facilitate career construction, life construction, life meaning and purposeful identitarian awareness (Di Fabio, 2014c) in those who benefit from the intervention. In this stage, career counseling interventions are based on psychological narration (Savickas, 2011a) and on dialogic interaction to facilitate individuals in self-planning in current society (Guichard, 2013a).

The economic crisis that has characterized the first decades of the 21st century, and the consequent scarcity of available resources, have led guidance and career counseling processes to refer to principles of accountability in order to offer effective interventions without dissipating the scarce economic resources available (Di Fabio, 2014a; Whiston, 1996, 2001). Traditionally, exclusively quantitative tools have been used to verify the effectiveness of guidance and career counseling interventions (Di Fabio et al., 2013; Oliver & Spokane, 1988) but dialogue psychological interventions are intrinsically narrative and therefore qualitative. To overcome this gap, Blustein et al. (2005) call for the need to develop new qualitative tools to measure narrative change since traditional quantitative tools are not automatically capable of detecting qualitative changes in self-narratives (Reh fuss & Di Fabio, 2012).

The most current qualitative tools specifically designed to identify changes in individuals' narratives before and after career counseling interventions on the basis of specifically designed coding systems are the following: the *Future Career Autobiography* (FCA; Reh fuss, 2009; Reh fuss & Di Fabio, 2012), the innovative *Life Adaptability Quality Assessments* (LAQuA; Di Fabio, 2015), the *Career Counseling Innovative Outcomes* (CCIO; Di Fabio, 2016a), and *Qualitative SIFS Evaluation For Future* (QSEF; Di Fabio & McIlveen, 2018). These qualitative tools are composed of narrative questions with different focuses, which are administered before and after the interventions and analysed with a specific coding system.

The FCA is based on eight themes of change defined by Reh fuss (2009). The LAQuA consists of 24 qualitative descriptors developed by Di Fabio (2015), on the basis of the 24 items of the *Career Adapt-Abilities Inventory-International Version 2.0* (Savickas & Porfeli, 2012). The CCIO by Di Fabio (2016a), inspired by the *Innovative Moments Coding System* (Cardoso et al., 2014), evaluates career counseling outcomes in terms of innovative moments comparing narratives before and after the intervention based on five categories (Gonçalves et al., 2011). The QSEF is based on nine categories of narrative change developed by Di Fabio and McIlveen (2018) according to Guichard's theory of identity (2004, 2005, 2013a) and its subjective identity forms system (SIFS).

As we can easily see, this 21st century stage is rich in theoretical production and intervention. Still in this first stage of the 21st century, it is worth remembering that Jean Guichard established the UNESCO Chair of Lifelong Guidance and Counseling at the University of Wrozklaw (Poland) in 2013. As stated by Guichard (2013a) during the inaugural conference at the University of Wroclaw, this UNESCO Chair was born with the aim of «promoting an integrated system of research, training, information and documentation activities in the field of vocational guidance and life and career design counseling. It seeks to facilitate networking and collaboration of scholars affiliated with high-level, internationally recognized universities and other higher education institutions in Europe,

Africa, Latin America and other regions of the world» (UNESCO Chair of Lifelong Guidance and Counseling, 2023).

The goals of this UNESCO Chair are the following: «to compare and model effective orientation devices based on the cultural specificities of each of the countries involved, increasing quality standards; to strengthen teaching and research on guidance in order to generate local innovations in education, work and skills development; to develop the skills and professionalization of guidance and career counseling experts» (Guichard, 2013b).

Jean Guichard (*Conservatoire national des arts et métiers Cnam — Institut national d'étude du travail et d'orientation professionnelle*, Inetop, Paris, France) — was the Head of the Chair from 2013 until 2017, after him Maria Eduarda Duarte (University of Lisbon, Portugal) was in charge. Since 2022, the Head of the Chair is Valerie Cohen Scali (*Conservatoire national des arts et métiers Cnam — Institut national d'étude du travail et d'orientation professionnelle*, Inetop, Paris, France). This Chair continues to be very active in promoting and supporting evolutions and enhancements in favour of current and evolved intervention theories and practices in this area.

From the first stage to the second stage of the 21st century

The transition from the first stage to the second stage of the 21st century is characterized by 21st century scientific career models, capable of enriching perspectives and progressively requiring more integration between vocational psychology and work and organizational (I/O) psychology. In particular, the psychology of working framework (Blustein, 2006) and the relational theory of working (Blustein, 2011) prepare the ground that will be enhanced by the psychology of working theory (Duffy et al., 2016).

The psychology of working framework (Blustein, 2006) recognizes that work allows us to fulfil three types of need: survival and power, social connection and self-determination. Furthermore, in this framework, it should be underlined how traditional vocational psychology theories were focused on people with high volition and opportunities without adequately considering people marginalized on the basis of different reasons (gender, race, social class, etc.) nor contextual factors that influence the existences of marginalized individuals (Blustein, 2006, 2013).

The value of inclusive theoretical models that consider both individual factors (included in the traditional vocational theories) and both social and contextual factors is recognized. In 2011, Blustein developed the relational theory of working. Within this theory, working is definitely seen as an inherently relational act where «each decision, experience and interaction with the world of work

is understood, influenced and shaped by relationships» (Blustein, 2011, p. 1). This background allows us to also conceptualize that the career project is an intrinsically relational act (Di Fabio, 2014b).

Starting from this framework, the psychology of working theory (Duffy et al., 2016) integrated the concepts of traditional vocational theories with sociocultural factors considered essential for career choice and work meaning for people, particularly those in marginalized positions in the society. The value of social justice and multiculturalism, considering an inclusive perspective on work that overcomes social status, discrimination and marginalization experiences, barriers, and low work volition, are affirmed.

Other scientific career models presented during this stage are life meaning (Bernaud, 2013; Bernaud et al., 2015), and the positive self & relational management model (Di Fabio & Kenny, 2016). Meaning is seen both as a product (result of an existential reflection) and as a process (a reflective path regarding past, present and future) (Bernaud, 2013; Bernaud et al., 2015). The positive self & relational management model (Di Fabio & Kenny, 2016) emphasized «individuals' strengths, potentials and varied talents in a lifespan perspective and the positive dialectic of the self in relationships» (p. 6), promoting effective lifelong self and relational management across the different professional and personal transitions as well as the complex challenges of the current century (Blustein, 2011; Di Fabio, 2014c; Di Fabio & Kenny, 2016; Di Fabio & Maree, 2013).

During this second stage of the 21st century, the world of work is changing quickly and individuals experience a loss of sense of meaning and connection. Reflecting on how individuals construct their work and life meaning becomes critical for constructing decent work and decent lives (Di Fabio & Blustein, 2016). There is a call for «the transition from the paradigm of motivation to the paradigm of meaning, where the sustainability of the decent life project is anchored to a meaningful construction» (Di Fabio & Blustein, 2016, p. 1).

Preparing the third stage...

Centring on meaning and the new paradigm of meaning (Di Fabio & Blustein, 2016) calls for other critical concepts in the evolution of reflections at different but progressively more integrated levels, with a great contribution from both vocational psychology and work and organizational (I/O) psychology. In particular, we underline decent work (Duffy et al., 2016), decent lives (Di Fabio & Blustein, 2016; Di Fabio et al., 2023), and healthy lives (Kenny & Di Fabio, 2023).

The attention to decent work emerged many years ago. The International Labour Organization (ILO; 1999, 2008, 2012, 2015) has been crucial over the years in promoting decent work as an aspirational human right (Di Fabio & Kenny, 2019).

The current definition by ILO reports: «Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for all, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men» (ILO, 2023). So, the original ILO four dimensions (employment creation, social protection, rights at work, and social dialogue) have been progressively refined and strengthened by the ILO.

The psychology of working theory (PWT; Duffy et al., 2016) calls to take a psychologically inclusive and multi-disciplinary perspective to increase decent work for individuals with less work volition by reason of economic constraints and marginalization. This theory underlines the centrality of social and economic factors, considering decent work as a fundamental result of the interaction among psychological, contextual and economic factors. The PWT highlights the role of contextual factors on the individual psychological experience of work. In this perspective, decent work goes beyond a consideration of macrolevel economic indices, including a psychological perspective on the following aspects: «(a) physical and interpersonally safe working conditions (e.g., absence of physical, mental, or emotional abuse), (b) hours that allow for free time and adequate rest, (c) organizational values that complement family and social values, (d) adequate compensation, and (e) access to adequate health care» (Duffy et al., 2016, p. 130).

Considering the worth of the shift from the motivation paradigm to the meaning paradigm (Di Fabio & Blustein, 2016), decent work is anchored to a construction full of authentic connection and meaning (Di Fabio & Blustein, 2016). In the same line, decent lives are therefore deeply anchored to the complete realization of one's own authenticity for reaching meaningfulness in work and also in life (Di Fabio et al., 2023). Recently, following the suggestions by the American Public Health Association (APHA; Pratap et al., 2022) that propose decent work as a public health goal, there has been a transition from decent work to healthy work. In a policy document of the APHA, Pratap et al. (2022) highlighted the links between the ILO concept of decent work and healthy work.

This transition is important, authorizing us to think of decent work also as a critical component for building healthy lives (Kenny & Di Fabio, 2023). The links between decent work and health are recognized by the World Health Organization, which underlined the inextricable association between health and employment and the value of promoting safe, healthy and secure work in order to reduce health inequities due to employment (Lima et al., 2022). It is fundamental to improve concrete actions to promote decent work for all and thus enhance public health (Pratap et al., 2022). In the USA, an increase in

income inequality and in demanding and dangerous working conditions and a decrease in decent work due to different factors (for example, racism, inadequate labour laws, failed immigration policies, etc.) generated negative effects on workers' health.

The COVID-19 pandemic exacerbated this situation. This policy document suggested the value of research in developing, measuring, and implementing decent work. So, the APHA has now incorporated the ILO's Decent Work Agenda into their policy statements about public health (Pratap et al., 2022). This perspective helps reaffirm the value of healthy organizations (Di Fabio et al., 2020), which nurture a virtuous healthy circle of meaning, authenticity, purpose and productivity (Kenny & Di Fabio, 2023; Peiró et al., in press).

Decent work and decent lives mean contributing with critical ingredients towards building healthy lives, which in turn means contributing to building healthy communities for healthier societies, marked by well-being not only in terms of hedonic but above all eudaimonic well-being. Hedonic well-being comprehends an affective component including positive and negative affect (Watson et al., 1988) and a cognitive component in life satisfaction (Diener et al., 1985). Life satisfaction represents the global cognitive evaluation of individuals in their lives (Diener et al., 1985). Instead, eudaimonic well-being regards optimal functioning, self-realization, life meaning, purposefulness (Ryan & Deci, 2001; Waterman et al., 2010), flourishing in social and psychological dimensions, and well-being in fundamental intrapersonal and extrapersonal aspects (Diener et al., 2010).

Guidance and career counseling interventions in the current scenario: the third stage of the 21st century

The third phase of guidance and career counseling in the 21st century is also characterized by new current perspectives relative to the themes of sustainability, human security, and active lives. Starting from a creative synthesis (Hartung, September 15, 2023, One-Day International Conference, Florence, Italy), there are three paradigms: matching/guidance, managing/education-coaching, and meaning-making/career construction. Now the need has emerged to go further, with a new paradigm (Hartung & Di Fabio, September 15, 2023, One-Day International Conference, Florence, Italy), in light of the psychology of sustainability and sustainable development (Di Fabio, 2017b; Di Fabio & Cooper, 2023; Di Fabio & Peiró, 2018, 2023; Di Fabio & Rosen, 2018, 2020; Peiró et al., in press; Rosen & Di Fabio, 2023) from a sustainability science (Takeuchi et al., 2017) perspective, with its sustainability and sustainable development critical issues that are dominating the current world scene in terms of priority and urgency.

The 21st century is characterized by a complex scenario including change (Weiten et al., 2014), acceleration (Rosa, 2015), complexity (Landy & Conte, 2016), industry 4.0 (Breque et al., 2021; Majerník et al., 2022) and industry 5.0 (Ben Youssef et al., 2023; Leng et al., 2022). Following Orso et al. (2022), industry 4.0 is focused on technology rather than on a human-oriented perspective whereas industry 5.0 has led to a transition to a humancentric view, where the well-being of workers is a priority. Thus, in this context, industry 4.0 is a methodology for generating a transformation from industrial production dominated by the use of machinery to digital production. It is characterized by minimal human intervention.

Through digitalization, cloud computing, the internet of things and big data, and the application of fully automated and self-sufficient production processes integrated into the supply chain, human intervention is reduced to the bare minimum (Lasi et al., 2014; Oztemel & Gursev, 2020; Castelo-Branco et al., 2019). The following evolution of industry 5.0 (Pluchino et al., 2023) is based on three pillars: human-centricity, resilience and sustainability. It aims to develop, through the use of technologies, inclusive, sustainable, and healthy working environments for the entire workforce (Lachvajderová et al., 2023). It underlines the central role of workers in the digital transformation of companies. Cognitive computing, cyber-physical systems and artificial intelligence (AI) support the empowerment of operators (Lachvajderová et al., 2023).

In this new scenario, environmental challenges represent urgent issues for our current society and economy, as well as a fundamental concern for human health (Heeren & Asmundson, 2023; Morrison et al., 2022). The sustainability of life on earth is an incontestable global, scientific, political, and educational issue (Cianconi et al., 2023; World Health Organization, 2023).

In this framework, sustainability science (Takeuchi et al., 2017) deserves attention, aiming to preserve the planet and to ensure the health and well-being of human beings, promoting sustainable development in line with the United Nations Sustainable Development Goals. Sustainability science (Takeuchi et al., 2017) established a trans-disciplinary applied research and intervention field using a collaborative approach from various disciplines: natural and physical sciences; social sciences; and humanities.

Within the domain of sustainability science, the psychology of sustainability and sustainable development (Di Fabio, 2017b; Di Fabio & Cooper, 2023; Di Fabio & Peiró, 2018, 2023; Di Fabio & Rosen, 2018, 2020; Peiró et al., in press; Rosen & Di Fabio, 2023) is a current research and intervention area which is also crucial for guidance and career counseling. It enhances the transdisciplinary perspective of sustainability science, aiming at opening the black box of psychological processes to safeguard the planet for future generations and to enhance human well-being (Di Fabio & Rosen, 2018; Di Fabio & Cooper, 2023).

It studies in depth the internal psychological processes involved in decision-making and behaviours related to sustainability and sustainable development, whether alone or related to external processes: «processes within individual(s), within environment(s), between individual(s), between environment(s), between individual(s) and environment(s), and between living being(s) and the natural world/universe, ranging from the past to the present and into the future» (Rosen & Di Fabio, 2023, p. 13).

In this framework, the construct of eco-generativity (Di Fabio & Svicher, 2023) is also located. Eco-generativity is defined as the «capacity of individuals to contribute to the preservation of the environment and promote sustainable practices for the benefit of future generations» (Di Fabio & Svicher, 2013, p. 2). In this framework, it is also important to reflect on the issue of sustainable careers (De Vos et al., 2020), considering that at the basis of a sustainable project for decent work and decent lives there is meaningfulness (Di Fabio, 2017b; Di Fabio & Blustein, 2016). Professional and life projects are more sustainable if they are strongly embedded in a meaningful construction and thus defined by coherence, direction, significance, and belonging (Bernaud, 2013; Di Fabio, 2017b; Schnell et al., 2013).

The sustainability of the life project for decent work and decent lives is anchored to a life full of authentic connection and meaning (Di Fabio, 2017a; Di Fabio & Blustein, 2016). Professional and personal projects and their realization in a sustainable development framework are enhanced on the basis of the presence of meaning (Di Fabio & Blustein, 2016) and details of meaning (Di Fabio, 2017b), including respectivity towards self and others (Di Fabio, 2017b; Di Fabio & Maree, 2016; Maree, 2012) and relationality (self/others) (Blustein, 2011; Di Fabio, 2016b; Di Fabio & Gori, 2016; Smith et al., 2023) including others who are near/far geographically and temporally (Di Fabio & Tsuda, 2018). The value of career and sustainable working for fostering decent work and decent lives (Kenny et al., 2023), including sustainable livelihoods (Carr, 2023a, 2023b; Carr et al., 2018, 2023), is also stressed in the current scenario.

In this sustainability and sustainable development framework, another very promising construct in relation to decent work and meaning is calling. In line with the most cited definition by Dik and Duffy (2009) «a calling is a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation» (p. 427). Calling can be considered as a route for instilling meaningfulness into work (Dik & Duffy, 2009). Calling is connected with both hedonic well-being and eudaimonic well-being both in life and at work (Dobrow et al., 2019, 2023). Decent work, in turn, is connected with meaningful work (Blustein et al., 2023). Further research is thus needed to study in depth the possible

relationships between calling and decent work also in relation to meaningful work. On this basis, calling is a promising variable because it can be considered as «solar energy», always available without any costs for constructing aspects of decent work, contributing to decent lives and healthy lives, simultaneously responding within a framework of sustainability and sustainable development.

Another very promising current perspective for the third phase of the 21st century is human security psychology (Hodgetts et al., 2023). This is «a dynamic and contextually current perspective on people as agentive beings entangled within evolving natural and social formations that can foster or undermine their experiences of [in]security» (Hodgetts et al., 2023, p. 177). In an uncertain and insecure world, we must construct certainty and security within ourselves by constructing our identities and adapting to changes in self and situations (Hartung, 2023).

Finally, for this third stage of the 21st century, the current reflections by Guichard (2022) are precious. The main question he underlined is the following: «how to support active lives that meet the challenges of the 21st century (economy, ecology and politics)?» Guichard starts from the concept of active lives (Arendt, 1958; Guichard, 2022), which include three aspects: Labour, Working and Action.

Labour refers to all activities permitting individuals to uphold their lives (activities which are constantly repeated, essential for their survival and leave no trace of any produced works). The connected question is: «Could I immediately find labour to ensure my daily survival or living?».

Working refers to productive activity. People achieve something fairly durable where they can identify themselves. The connected question is «What job would allow me to become who I expect to be?».

Action concerns the collective organizational activities necessary so that labour and work always produce something more than their immediate result. The connected question is: «By what forms of action could we together contribute to solving certain problems (economic, social, political, etc.)?».

Guichard (2022) also stressed that we are facing the Anthropocene crisis — Capitalocene crisis characterized by three main aspects (Guichard, 2018): 1) problems of demography and social justice; 2) a major ecological challenge in terms of global warming, depletion of natural resources, planetary pollution, accumulation of waste, etc.; and 3) serious degradation of work and employment. This crisis is so serious that 2015 brought a resolution titled «Transforming our world: the 2030 Agenda for Sustainable Development», unanimously approved by the member states of the United Nations. In this framework, Guichard (2022) proposed implications for the interventions, considering their principal aim to be helping individuals and groups — and particularly young people — to answer the question: «By what forms of active life can I contribute with others (thus can we contribute) to sustainable and fair development in solidarity?».

Guichard (2022) also reminds us of the importance of skills and adaptability with new guidance and career counseling interventions which cannot avoid centring on sustainable and equitable development. In this regard, we can underline the creative flexibility that we need in the current scenario in reference to skills: if in the 21st century some skills are no longer necessary, we can re-skill, up-skill and crea(te)-skill (Di Fabio & Maree, 2016; Kennedy, Latham, & Jacinto, 2016).

Finally, an additional reflection regards sustainability requiring even more of a perspective of accountability in terms of efficacy and effectiveness of guidance and career counseling interventions (Sexton, Schofield, & Whiston, 1997; Whiston, 2001; Di Fabio, 2014a). Accountability requires attention to intervention effectiveness, service costs, and best practices supported by research (Di Fabio, 2014a). In order to evaluate guidance and career counseling interventions and their effectiveness, Di Fabio (2014a) developed guidelines for accountability in the 21st century based on the following aspects:

- 1) The Pillar of Accountability... 2) Attention to the choice of outcome criteria to evaluate effective career counselling: effective outcomes in relation to different interventions, the use of multiple measures from multiple perspectives...
- 3) A new paradigm and, consequently, new perspectives for the 21st century: the evolution of career intervention assessment from scores on psychometric scales to scores and stories... 4) Moving from tradition to innovation in a qualitative + quantitative perspective... 5) The need for new qualitative measures to detect narrative change... 6) The need to consider new quantitatively derived evidence of outcomes, more congruent with new 21st century narrative and life design interventions... 7) The need for new intervention methodologies compatible with accountability principles (less cost + more effectiveness)... 8) Different outcome criteria adapted to differential intervention goals based on the new intervention taxonomy of Guichard (2013a) (information, guidance and dialogue) to verify the effectiveness of intervention... 9) The need for a positive psychology perspective in career management/life management: positive information, positive guidance, positive dialogue to enhance individual strengths and self-attunement... and 10) The consequent need to use positive psychology goals to verify the effectiveness of the intervention ... (p. 199).

Furthermore, guidance and career counseling interventions in the 21st century (Di Fabio, 2014a) often asked for a simple reflection on client satisfaction, that is only satisfaction with the relational behaviours of the professional. The difference in literature between relational behaviours and technical behaviours of professionals (Di Fabio et al., 2013) is well established, calling for the importance of training professionals in both technical and relational aspects.

Conclusions

In this scenario, guidance and career counseling can only be enhanced, educational, reflective and anchored to the issues of sustainability and sustainable development as well as to active, secure decent healthy lives, by facing new challenges and preparing for the urgency of the fourth paradigm (Hartung, Di Fabio, September 15, 2023, Florence, Italy). The importance of multi-disciplinarity and multi-professionality team work in various contexts, the psychological contributions and pedagogical contributions and their convergence on the topic of caring, and the educational and training value of processes in strength-based prevention perspectives (Di Fabio & Saklofske, 2021) as well as in a primary prevention perspective (Di Fabio & Kenny, 2016) are underlined.

Guidance and career counseling interventions are at a fork in the road: it is no longer tenable that they do not systematically deal with promoting harmonization of internal and external complexity as well as generativity and responsibility towards others in time and space (Di Fabio & Tsuda, 2018), and with taking charge in a responsible way of the issues of sustainability and sustainable development throughout careers and lives, and the structuring of related projects.

This perspective emphasizes the importance for professionals to both carefully know the first phase and the second phase of the 21st century (life design and the following constructs and interventions) and to focus on the challenges that have emerged forcefully within the current scenario. Consequently, the fourth paradigm is called upon to rally and to respond appropriately in terms of interventions, also considering that the various professional contexts are going to produce continuous and unimaginable evolutions.

Interventions to support career choice and career development also require considering the relevance of real knowledge and expertise of the functioning of organizations — public and private — of working environments and their characteristics (from small to medium-sized enterprises up to multinationals), always considering the principles of accountability and the value of applied research. Guidance and career counseling are always at the heart of our desire to understand better all together, with empirical research and effective and efficient current practices corroborated by an evidence-based perspective.

References

- Arendt, H. (1958). *The Human Condition*. Chicago: University of Chicago Press.
- Athanasou, J. A., & Pereira, H. N. (2020). *International handbook of career guidance* (2nd ed.). New York: Springer.
- Athanasou, J. A., & Van Esbroeck, R. (2008). *International handbook of career guidance*. New York: Springer.
- Baumeister, R. F. (1991). *Meanings of life*. New York: Guilford.

- Baumgarten, F. (1949). *Orientation et selection professionnelles par l'examen psychologique du caractere*. Paris: Dinod.
- Ben Youssef, A., & Mejri, I. (2023). Linking Digital Technologies to Sustainability through Industry 5.0: A bibliometric Analysis. *Sustainability*, 15(9), 7465. <https://doi.org/10.3390/su15097465>
- Bernaudo, J. L. (2013). Career counseling and life meaning: A new perspective life designing for research and applications. In A. Di Fabio & K. Maree (Eds.), *Psychology of Career Counseling: New challenges for a new era* (pp. 29-40). Hauppauge, NY: Nova Science Publishers.
- Bernaudo, J.-L., Lhotellier, L., Sovet, L., Arnoux-Nicolas, C., & Pelayo, F. (2015). *Psychologie de L'accompagnement: Concepts et Outils pour Développer le Sens de la vie et du Travail*. Paris: Dunod.
- Bernaudo, J.-L., Lhotellier, L., Sovet, L., Arnoux-Nicolas, C., & Pelayo, F. (2016). *Psicologia dell'accompagnamento. Il senso della vita e del lavoro nell'orientamento professionale [Psychologie de l'accompagnement. Concepts et outils pour développer le sens de la vie et du travail] [Psychology of accompanying. Concepts and tools to develop a life and work meaning]*. (Italian version edited by A. Di Fabio). Trento: Erickson.
- Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Mahwah, NJ: Erlbaum.
- Blustein, D. L. (2011). A relational theory of working. *Journal of Vocational Behavior*, 79, 1-17. <https://doi.org/10.1016/j.jvb.2010.10.004>
- Blustein, D. (2013). *The psychology of working: A new perspective for career development, counseling, and public policy*. London: Routledge.
- Blustein, D. L., Kenna, A. C., Murphy, K. A., DeVoy, J. E., & DeWine, D. B. (2005). Qualitative research in career development: Exploring the center and margins of discourse about careers and working. *Journal of Career Assessment*, 13(4), 351-370. <https://doi.org/10.1177/1069072705278047>
- Blustein, D. L., Lysova, E. I., & Duffy, R. D. (2023). Understanding decent work and meaningful work. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 289-314. <https://doi.org/10.1146/annurev-orgpsych-031921-024847>
- Blustein, D. L., Rasheed, A., & Flores, L., (2019). Vocational Psychology: Expanding the vision and enhancing the impact. *The Counseling Psychologist*, 47(2) 166-221. <https://doi.org/10.1177/001100001986121>
- Breque, M., De Nul, L., & Petridis, A. (2021). *Industry 5.0: Towards a sustainable human-centric and resilient european industry Report*. European Commission.
- Cardoso, P., Silva, J. R., Gonçalves, M. M., & Duarte, M. E. (2014). Innovative moments and change in Career Construction Counseling. *Journal of Vocational Behavior*, 84, 11-20. <https://doi.org/10.1016/j.jvb.2013.10.001>
- Carr, S. C. (2023a). *Wage and wellbeing: Toward sustainable livelihoods*. London: Springer.
- Carr, S. C. (2023b). From unsustainable jobs to sustainable livelihoods. In D. L. Blustein & L. Y. Flores (Eds.), *Rethinking work: Essays on building a better workplace* (pp. 118-22). London: Routledge.
- Carr, S. C., Hopner, V., Hodgetts, D., & Young (Eds.). (2023). *Tackling precarious work: Toward sustainable livelihoods*. London: Routledge/SIOP Frontiers.
- Carr, S. C., Maleka, M., Meyer, I., Barry, M. L., Haar, J., Parker, J., ... & Naithani, A. (2018). How can wages sustain a living? By getting ahead of the curve. *Sustainability Science*, 13(4), 901-917. <https://doi.org/10.1007/s11625-018-0560-7>
- Castelo-Branco, I., Cruz-Jesus, F., & Oliveira, T. (2019). Assessing Industry 4.0 readiness in manufacturing: Evidence for the European Union. *Computers in Industry*, 107, 22-32. <https://doi.org/10.1016/j.compind.2019.01.007>
- Cianconi, P., Hanife, B., Hirsch, D., & Janiri, L. (2023). Is climate change affecting mental health of urban populations? *Current Opinion in Psychiatry*. <https://doi.org/10.1097/yc0.000000000000859>

- De Vos, A., Van der Heijden, B., Akkermans, J. (2020). Sustainable careers: Toward a conceptual model. *Journal of Vocational Behavior*, 117, 103-196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. <https://doi.org/10.1007/s11205-009-9493-y>
- Di Fabio, A. (1998). *Psicologia dell'orientamento. Problemi, metodi e strumenti [Vocational guidance. Problems, methods, instruments]*. Firenze: Giunti.
- Di Fabio, A. (2009). *Manuale di psicologia dell'orientamento e career counseling nel XXI secolo [Handbook of vocational psychology and career counseling in the XXI century]*. Firenze: Giunti O.S.
- Di Fabio, A. (2014a). Career counseling and positive psychology in the 21st century: New constructs and measures for evaluating the effectiveness of intervention. *Journal of Counsellogy*, 1, 193-213.
- Di Fabio, A. (2014b). «Constructing my Future Purposeful Life»: A new Life Construction intervention. In A. Di Fabio & J.-L. Bernaud (Eds.), *The Construction of the Identity in 21st Century: A Festschrift for Jean Guichard* (pp. 219-239). Hauppauge, NY: Nova Science Publishers.
- Di Fabio, A. (2014c). The new purposeful identity awareness for the twenty-first century: Valorize themselves in the Life Construction from youth to adulthood and late adulthood. In A. Di Fabio & J.-L. Bernaud (Eds.), *The Construction of the Identity in 21st Century: A Festschrift for Jean Guichard* (pp. 157-168). Hauppauge, NY: Nova Science Publishers.
- Di Fabio, A. (2015). Life Adaptability Qualitative Assessment (LAQuA): A narrative instrument for evaluating counseling intervention effectiveness. In J. G. Maree & A. Di Fabio, A. (Eds.), *Exploring new horizons in career counselling: Turning challenges into opportunities* (pp. 43-62). Hauppauge, NY: Sense Publishers.
- Di Fabio, A. (2016a). Life design and career counselling innovative outcomes. *The Career Development Quarterly*, 64(1), 35-48. <https://doi.org/10.1002/cdq.12039>
- Di Fabio, A. (2016b). Positive Relational Management for healthy organizations: Psychometric properties of a new scale for prevention for workers. *Frontiers in Psychology. Organizational Psychology*, 7, 1523. <https://doi.org/10.3389/fpsyg.2016.01523>
- Di Fabio, A. (2017a). Positive Healthy Organizations: Promoting well-being, meaningfulness, and sustainability in organizations. *Frontiers in Psychology. Organizational Psychology*, 8, 1938. <https://doi.org/10.3389/fpsyg.2017.01938>
- Di Fabio, A. (2017b). The psychology of sustainability and sustainable development for well-being in organizations. *Frontiers in Psychology. Organizational Psychology*, 8, 1534. <https://doi.org/10.3389/fpsyg.2017.01534>
- Di Fabio, A., Bernaud, J. -L., & Kenny, M. E. (2013). Perceived career counselor relational and technical behaviors and outcomes among Italian university students. *Journal of Career Assessment*, 21, 190-199. <https://doi.org/10.1177/1069072712466721>
- Di Fabio, A., & Blustein, D. L. (2016). Editorial. In A. Di Fabio & D. L. Blustein (Eds.), Ebook Research Topic «From Meaning of Working to Meaningful Lives: The Challenges of Expanding Decent Work», in *Frontiers in Psychology. Organizational Psychology*, 7, 1119. <https://doi.org/10.3389/fpsyg.2016.01119>
- Di Fabio, A., Cheung, F., & Peiró, J. -M. (2020). Editorial Special Issue Personality and individual differences and healthy organizations. *Personality and Individual Differences*, 166. <https://doi.org/10.1016/j.paid.2020.110196>
- Di Fabio, A., & Cooper, C. L. (Eds.). (2023). *Psychology of sustainability and sustainable development in organizations*. London: Routledge.

- ledge Taylor & Francis Group. <https://doi.org/10.4324/9781003212157>
- Di Fabio, A., & Gori, A. (2016). Assessing Workplace Relational Civility (WRC) with a new multidimensional «mirror» measure. *Frontiers in Psychology. Section Organizational Psychology*, 7, 890. <https://doi.org/10.3389/fpsyg.2016.00890>
- Di Fabio, A., & Kenny, M. E. (2016). From decent work to decent lives: Positive Self and Relational Management (PS&RM) in the twenty-first century *Frontiers in Psychology. Section Organizational Psychology*, 7, 361. <https://doi.org/10.3389/fpsyg.2016.00361>
- Di Fabio, A., & Kenny, M. E. (2019). Decent work in Italy: Context, conceptualization, and assessment. *Journal of Vocational Behavior*, 110(Part A), 131-143. <https://doi.org/10.1016/j.jvb.2018.10.014>
- Di Fabio, A., & Maree, J. G. (Eds.). (2013). *Psychology of Career Counseling: New challenges for a new era. Festschrift in honour of Prof. Mark Savickas*. Hauppauge, NY: Nova Science Publishers.
- Di Fabio, A., & Maree, J. G. (2016). A psychological perspective on the future of work: promoting sustainable projects and meaning-making through grounded reflexivity. *Counseling. Giornale Italiano di Ricerca e Applicazioni*, 9(3). <https://doi.org/10.14605/CS931619>
- Di Fabio, A. & McIlveen, P. (2018). Qualitative SIFS Evaluation For Future (QSEF) coding system. In A. Di Fabio, & J.-L. Bernaud (Eds.), *Narrative interventions in post-modern guidance and career counseling: Innovative qualitative approaches, accountability, and case studies* (pp. 231-242). New York: Springer.
- Di Fabio, A., Medvide, M. B., & Kenny, M. E. (2023). Psychology of working theory: Decent work for decent lives. In S. C. Carr, V. Hopner, D. Hodgetts, & M. Young (Eds.), *Tackling precarious work: Toward sustainable livelihoods*. London: Routledge/SIOP Frontiers.
- Di Fabio, A., & Peiró, J. M. (2018). Human capital sustainability leadership to promote sustainable development and healthy organizations: A new scale. *Sustainability*, 10(7), 2413. <https://doi.org/10.3390/su10072413>
- Di Fabio, A., & Peiró, J. M. (2023). Human Capital Sustainability Leadership and Healthy Organizations: Its contribution to Sustainable Development. In A. Di Fabio & C. L. Cooper (Eds.), *Psychology of Sustainability and Sustainable Development in Organizations*. London: Routledge Taylor & Francis.
- Di Fabio, A., & Rosen, M. A. (2018). Opening the black box of psychological processes in the science of sustainable development: A new frontier. *European Journal of Sustainable Development Research*, 2(4), 47. <https://doi.org/10.20897/ejosdr/3933>
- Di Fabio, A., & Rosen, M. A. (2020). An exploratory study of a new psychological instrument for evaluating sustainability: The Sustainable Development Goals Psychological Inventory. *Sustainability MDPI*, 12, 7617. <https://doi.org/10.3390/su12187617>
- Di Fabio, A., & Saklofske, D. H. (2021). The relationship of compassion and self-compassion with personality and emotional intelligence. *PAID 40th Anniversary Special Issue. Personality and Individual Differences*, 169. <https://doi.org/10.1016/j.paid.2020.110109>
- Di Fabio, A., & Svicher, A. (2023). The Eco-Generativity Scale (EGS): A new resource to protect the environment and promote health. *International Journal of Environmental Research and Public Health*, 20(15), 6474. <https://doi.org/10.3390/ijerph20156474>
- Di Fabio, A. & Tsuda, A. (2018). The psychology of harmony and harmonization: Advancing the perspectives for the psychology of sustainability and sustainable development. *Sustainability*, 10(12), 4726. <https://doi.org/10.3390/su10124726>
- Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist*, 37(3), 424-450. <https://doi.org/10.1177/0011000008316430>
- Dobrow, S. R., Weisman, H., Heller, D., & Tostikharas, J. (2019). Calling attention to 20 years

- of research: A comprehensive meta-analysis of calling. In *Academy of management proceedings* (Vol. 2019, No. 1, p. 12789). Academy of Management.
- Dobrow, S. R., Weisman, H., Heller, D., & Tosti-Kharas, J. (2023). Calling and the good life: A meta-analysis and theoretical extension. *Administrative Science Quarterly*, *68*(2), 508-550. <https://doi.org/10.1177/00018392231159641>
- Duffy, R. D., Allan, B. A., England, J. W., Blustein, D. L., Autin, K. L., Douglass, R. P., Ferreira, J., & Santos, E. J. R. (2017). The development and initial validation of the Decent Work Scale. *Journal of Counseling Psychology*, *64*(2), 206-221. <https://doi.org/10.1037/cou0000191>
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, *63*(2), 127-148. <https://doi.org/10.1037/cou0000140>
- Gonçalves, M. M., Ribeiro, A. P., Mendes, I., Matos, M., & Santos, A. (2011). Tracking novelties in psychotherapy process research: the innovative moments coding system. *Psychotherapy Research*, *21*, 497-509. <https://doi.org/10.1080/10503307.2011.560207>
- Guglielmi, D., & Chiesa, R. (2021). *Orientamento scolastico e professionale. Modelli, metodologie, strumenti*. Bologna: il Mulino.
- Guichard, J. (2004). Se faire soi. *L'Orientation Scolaire et Professionnelle*, *33*, 499-534. <https://doi.org/10.4000/osp.226>
- Guichard, J. (2005). Life-long self-construction. *International Journal for Educational and Vocational Guidance*, *5*, 111-124. <https://doi.org/10.1007/s10775-005-8789-y>
- Guichard, J. (2009). Self-constructing. *Journal of Vocational Behavior*, *75*, 251-258. <https://doi.org/10.1016/j.jvb.2009.03.004>
- Guichard, J. (2010, March). *Les théories de la construction des parcours professionnels et de la construction de soi: Deux approches de la construction de la vie individuelle*. Paper presented at Colloque International INETOP, Paris, France.
- Guichard, J. (2013a, November). *Career guidance, education, and dialogues for a fair and sustainable human development*. Inaugural conference of the UNESCO chair of Lifelong guidance and counselling, University of Wrocław, Poland.
- Guichard (2013b). *UNESCO Chair of Lifelong Guidance and Counseling*. Retrieved from https://inetop.cnam.fr/medias/fichier/chair-unesco_1416145003012-pdf
- Guichard, J. (2018). Final Purposes for Life-and-Career Design Interventions in the Anthropocene Era. In V. Cohen-Scali, J. Rossier & L. Nota (eds.), *New Perspectives on Career Counseling and Guidance in Europe. Building Careers in Changing and Diverse Societies* (pp. 189-204). New York: Springer.
- Guichard, J. (2022). How to support the design of active lives that meet the challenges of the twenty-first century (economy, ecology and politics)? *Australian Journal of Career Development*, *31*(1), 5-13. <https://doi.org/10.1177/10384162221090>
- Guichard, J., Bangali, M., Cohen Scali, V., Pouyaud, J., Robinet, & M. L. (2017). *Concevoir et orienter sa vie: les dialogues de conseil en life design*. Évry-Grégy-sur-Yerre: Editions Qui plus est.
- Guichard, J., & Huteau, M. (2001). *Psychologie de l'orientation*. Paris: Dunod.
- Guichard, J., Pouyaud, J., De Calan, C., & Dumora, B. (2012). Identity construction and career development interventions with emerging adults. *Journal of Vocational Behavior*, *81*(1), 52-58. <https://doi.org/10.1016/j.jvb.2012.04.004>
- Gysbers, N. C., Heppner, M. J., & Johnston, J. A. (2009). *Career counseling: Contexts, processes, and techniques*. Alexandria, Virginia: American Counseling Association.
- Hartung, P. (2023, September). *Career Counseling in the XXI Century: Where we are and where we are going..* Invited Keynote at the One-Day International Conference «Career Counseling for Sustainable Career, Decent Work and Healthy Organizations «IAAP Special Project Promoting Decent Work for All», Sala Chiarugi, Department of Education, Languages, Intercultures, Literatures and Psychology

- (Psychology Section), University of Florence, Italy, September 15, 2023.
- Hartung, P. & Di Fabio, A. (2023, September). *Preliminary Conclusions* at the One-Day International Conference «Career Counseling for Sustainable Career, Decent Work and Healthy Organizations «IAAP Special Project Promoting Decent Work for All», Sala Chiarugi, Department of Education, Languages, Intercultures, Literatures and Psychology (Psychology Section), University of Florence, Italy, September 15, 2023.
- Heeren, A., & Asmundson, G. J. (2022). Understanding climate anxiety: What decision-makers, health care providers, and the mental health community need to know to promote adaptive coping. *Journal of Anxiety Disorders*, 102654. <https://doi.org/10.1016/j.janxdis.2022.102654>
- Hodgetts, D., Hopner, V., Carr, S., Bar-Tal, D., Liu, J. H., Saner, R., ... & Moghaddam, F. (2023). Human security psychology: A linking construct for an eclectic discipline. *Review of General Psychology*, 27(2), 177-193. <https://doi.org/10.1177/10892680221109124>
- International Labour Organization [ILO] (1999). *Report of the director-general: Decent work*. Retrieved from <http://www.ilo.org/public/english/standards/relm/ilc/ilc87/rep-i.htm>.
- International Labour Organization [ILO] (2015). International Labor Organization [ILO] (2008). *Work of work report 2008: Income inequalities in the age of financial globalization*. Retrieved from http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_100354.pdf
- International Labor Organization [ILO] (2012). *Decent work indicators: Concepts and definitions*. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf
- International Labour Organization [ILO] (2015). *Decent work and the 2030 agenda for sustainable development*. Retrieved from <http://www.ilo.org/global/topics/sdg-2030/lang-en/index.htm>.
- International Labour Organization [ILO] (2023). *Transformative change and SDG8*. Geneva: ILO.
- Kennedy, G., Latham, G., & Jacinto, H. (2016). *Education Skills for 21st Century Teachers*. London: Springer.
- Kenny, M. E., & Di Fabio, A. (2023). Decent work and decent lives in organizations for healthy lives. In A. Di Fabio & C. L. Cooper (Eds.), *Psychology of Sustainability and Sustainable Development in Organizations* (pp. 74-89). London: Routledge Taylor & Francis.
- Kenny, M. E., Di Fabio, A., & Carr, S. C. (2023). Special issue career and sustainable working: Fostering decent work and decent lives. *Australian Journal of Career Development*. Special Issue.
- Lachvajderová, L., Kádárová, J., & Sukopová, D. (2023). Significance of digitalization on the effectiveness. *InvEnt 2023: Industrial Engineering-Invention for Enterprise*, 40. <https://doi.org/10.3390/su15139973>
- Landy, F. J., & Conte, J. M. (2016). *Work in the 21st century: An introduction to industrial and organizational psychology*. Hoboken, NJ: John Wiley & Sons.
- Lasi, H., Fettke, P., Kemper, H. G., Feld, T., & Hoffmann, M. (2014). Industry 4.0. *Business & Information Systems Engineering*, 6, 239-242. <https://doi.org/10.1007/s12599-014-0334-4>
- Lawe, F. W. (1929). Gli effetti economici della psicologia industriale. In G. S. Myers (Ed.), *Introduzione alla psicologia industriale*. Taranto: Eta Kompass.
- Leng, J., Sha, W., Wang, B., Zheng, P., Zhuang, C., Liu, Q., ... & Wang, L. (2022). Industry 5.0: Prospect and retrospect. *Journal of Manufacturing Systems*, 65, 279-295. <https://doi.org/10.1016/j.jmsy.2022.09.017>
- Lima, J., Rohregger, B., & Brown, C. *Health, decent work, and the economy*. Retrieved from https://www.euro.who.int/__data/assets/pdf_file/0011/397793/SDG-8-policy-brief_4.pdf.
- Majerník, M., Daneshjo, N., Malega, P., Drábik, P., & Barilová, B. (2022). Sustainable development of the intelligent industry from Industry 4.0 to Industry 5.0. *Advances in Science and Tech-*

- nology. *Research Journal*, 16(2), 12-18. <https://doi.org/10.12913/22998624/146420>
- Maree, J. G. (2012). Promoting children's rights: rekindling respectivity. *South African Journal of Psychology*, 42, 295-300. <https://doi.org/10.1177/008124631204200301>
- Morrison, T. H., Adger, W. N., Agrawal, A., Brown, K., Hornsey, M. J., Hughes, T. P., Jain, M., Lemos, M. C., McHugh, L. H., O'Neill, S., & Van Berkel, D. (2022). Radical interventions for climate-impacted systems. *Nature Climate Change*, 12(12), 1100-1106. <https://doi.org/10.1038/s41558-022-01542-y>
- Oliver, L. W., & Spokane, A. R. (1988). Career-intervention outcome: What contributes to client gain? *Journal of Counseling Psychology*, 35(4), 447-462. <https://doi.org/10.1037/0022-0167.35.4.447>
- Orso, V., Ziviani, R., Bacchiega, G., Bondani, G., Spagnolli, A., & Gamberini, L. (2022). Employee-centric innovation: Integrating participatory design and video-analysis to foster the transition to Industry 5.0. *Computers & Industrial Engineering*, 173, 108661. <https://doi.org/10.1016/j.cie.2022.108661>
- Oztemel, E., & Gursev, S. (2020). Literature review of Industry 4.0 and related technologies. *Journal of Intelligent Manufacturing*, 31, 127-182. <https://doi.org/10.1007/s10845-018-1433-8>
- Parsons, F. (1909). *Choosing a vocation*. Boston: Houghton Mifflin.
- Pelletier, D., Noiseux, G., & Bujold, C. (1974). *Développement personnel et croissance personnelle*. London: McGraw-Hill.
- Peiró, J. M., Svicher, A., Di Fabio, A. (2023). Innovative behaviors and eudaimonic well-being: The contribution of human capital sustainability leadership to sustainable career, decent work, decent lives and healthy lives. *Australian Journal of Career Development*.
- Pluchino, P., Orso, V., & Gamberini, L. (2023, September). Sustainability and Well-being in Industry 5.0: Sustainable Development and Human-Centric Workplaces. In A. Di Fabio (Chair). *Symposium Psychology of Sustainability and Sustainable Development in Organiza-*
- tions* at the Annual Conference of the Italian Association of Psychology, University of Cagliari, Cagliari, Italy, September 6-8, 2023.
- Pombeni, M. L. (1997). *Il colloquio di orientamento*. Roma: La nuova Italia scientifica.
- Pombeni, M. L., & Chiesa, R. (2009). *Il gruppo nel processo di orientamento: teorie e pratiche*. Roma: Carocci.
- Pratap, P., Sokas, R., Landsbergis, P., Lewis, N., Porter, N., Gascon, L., et al. (2022). Support Decent Work for All as a Public Health Goal in the United States. *American Public Health Association policy document*. Approved November 7.
- Rehffuss, M. C. (2009). The Future Career Autobiography: A narrative measure of career intervention effectiveness. *The Career Development Quarterly*, 58(1), 82-90. <https://doi.org/10.1002/j.2161-0045.2009.tb00177.x>
- Rehffuss, M., & Di Fabio, A. (2012). Validating the Future Career Autobiography as a measure of narrative change. *Journal of Career Assessment*, 20, 452-462. <https://doi.org/10.1177/10690727124500>
- Rosa, H. (2015). *Accelerazione e alienazione. Per una teoria critica del tempo nella tarda modernità [Acceleration and alienation. For a critical theory of time in late modernity]*. Torino: Einaudi.
- Rosen, M. A., & Di Fabio, A. (2023). Psychology of sustainability and sustainable development in organizations: Empirical evidence from environment to safety to innovation and future research. In A. Di Fabio & C.L. Cooper (Eds.), *Psychology of Sustainability and Sustainable Development in Organizations* (pp. 20-41). London: Routledge Taylor & Francis.
- Ryan, R. M., & Deci, E. L. (2001). To be happy or to be self-fulfilled: A review of research on hedonic and eudaimonic well-being. In S. Fiske (Ed.), *Annual Review of Psychology* (Vol. 52, 141-166). Annual Reviews.
- Savickas, M. L. (1996). A framework for linking career theory and practice. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 191-208). Boston: Davies-Black.

- Savickas, M. L. (2001). Toward a comprehensive theory of career development: Disposition, concerns and narratives. In F. T. L. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow* (pp. 295-320). Mahwah, NJ: Lawrence Erlbaum.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). London: Wiley & Sons.
- Savickas, M. L. (2006). *Career Counseling (DVD)*. Washington: American Psychological Association.
- Savickas, M. L. (2008, May). *Career as story*. Invited paper presented at 10th International Congress Guidance to choice. Research, training, applications. Florence, Italy.
- Savickas, M. L. (Ed.). (2011a). *Career counseling*. Washington: American Psychological Association.
- Savickas, M. L. (2011b). The self in vocational psychology: Object, subject and project. In P. J. Hartung & L. M. Subich (Eds.), *Developing self in work and career: Concepts, cases, and contexts* (pp. 17-33). Washington: American Psychological Association.
- Savickas, M. (2014). *Career counseling: Guida teorica e metodologica per il XXI secolo [Career counseling: Theoretical and methodological guide for the 21st century]*. (Italian version edited by A. Di Fabio). Trento: Erickson.
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80, 661-673. <https://doi.org/10.1016/j.jvb.2012.01.011>
- Savickas, M., Nota, L., Rossier, J., Dauwalder, J., Duarte, M., Guichard, J., Soresi, S., Van Esbroeck, R., & Van Vianen, A., (2009), Life designing: A paradigm for career construction in the 21st century, *Journal of Vocational Behavior*, 75(3), 239-250. <https://doi.org/10.1016/j.jvb.2009.04.004>
- Schnell, T., Höge, T., & Pollet, E. (2016). Predicting meaning in work: Theory, data, implications. In D. Leontiev (Ed.), *Positive psychology in search for meaning* (pp. 87-98). London: Routledge.
- Sexton, T. L., Schofield, T. L., & Whiston, S. C. (1997). Evidence-based practice: A pragmatic model to unify counseling. *Counseling and Human Development*, 30(3), 17-33.
- Smith, C. M., Allan, B. A., & Blustein, D. L. (2023). Decent work and self-determination needs: Exploring relational workplace civility as a moderator. *Journal of Career Assessment*, 1-17, <https://doi.org/10.1177/10690727231186768>
- Super, D. E. (1957). *The psychology of careers*. New York: Harper and Row.
- Takeuchi, K., Osamu, S., Lahoti, S., & Gondor, D. (2017). Growing up: 10 years of publishing sustainability science research. *Sustainability Science*, 12, 849-854. <https://doi.org/10.1007/s11625-017-0484-7>
- UNESCO Chair of Lifelong Guidance and Counseling (2023). *UNITWIN/UNESCO Chair*. Retrieved from <https://unesco.uwr.edu.pl/en/>
- Waterman, A. S., Schwartz, S. J., Zamboanga, B. L., Ravert, R. D., Williams, M. K., Bede Agocha, V., et al. (2010). The questionnaire for eudaimonic well-being: Psychometric properties, demographic comparisons, and evidence of validity. *Journal of Positive Psychology*, 5, 41-61. doi: 10.1080/17439760903435208
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070. <https://doi.org/10.1037//0022-3514.54.6.1063>
- Weiten, W., Dunn, D. S., & Hammer, E. Y. (2014). *Psychology applied to modern life: Adjustment in the 21st century*. Boston: Cengage Learning.
- Whiston, S. C. (1996). Accountability through action research: Research methods for practitioners. *Journal of Counseling & Development*, 74, 616-623. <https://doi.org/10.1002/j.1556-6676.1996.tb02301.x>

Whiston, S. C. (2001). Selecting career outcome assessments: An organizational scheme. *Journal of Career Assessment*, 9(3), 215-228. <https://doi.org/10.1177/106907270100900301>

World Health Organization [WHO] (2023). *Climate change and health*. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement>