



Satisfaction with Life and Career Indecision in Italian University Students: The Mediating Role of Presence of Meaning in Life

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Abstract. The present study examines the role of the presence of meaning in life and life satisfaction on university students' career indecision. 164 Italian university students ($M_{age} = 23.26$; $SD_{age} = 3.44$) took part in this study. Career Decision-making Difficulties Questionnaire, Meaning in Life Questionnaire, and Satisfaction with Life Scale were administered. To investigate the hypothesis that the presence of meaning in life would fully mediate the relationship between life satisfaction and career indecision, mediation analysis was performed with a 5000 bootstrap resampling procedure. The results showed that the presence of meaning in life fully mediates the relationship between life satisfaction and career indecision. The findings concerning meaning in life are essential for career practitioners in their clients' career decision-making process.

Keywords: Meaning in life · Career decision · University students

1 Introduction

Nowadays, careers unfold in an unpredictable economic environment. The nature of employment has suffered dramatic changes due to current challenges in the economy, society, and technology. In our contemporary society, young people are the most at-risk category of unemployment (International Labor Organization, 2020). Labor market uncertainty causes fragmented career paths (Baruch & Bozionelos, 2011) and interrupts paths across adulthood, making them de-standardized (Larson, 2011) and less predictable. This environment involves managing increasingly uncertain professional trajectories with consequently difficulties in the career decision-making process (Guichard & Fabio, 2015).

According to career development task, university students should be able to crystallize and specify their career options (Hartung & Niles, 2000; Lin & Flores, 2013). As a result, career practitioners are forced to do some more studies to grasp variables that influence the career decision-making process of university students to facilitate their career decision.

The present study puts together the career construct of career indecision and two key concepts of Positive Psychology, life satisfaction and meaning in life. Little is still known about how these concepts may impact the process of career development. This study aims to understand the pathway through which life satisfaction and meaning in life could promote career decisions. Although several studies have explored the link between life satisfaction and career indecision, specifically life satisfaction as an outcome, no studies have investigated the relationship between meaning in life and career indecision. Furthermore, only one study has focused on the linear relationship between the meaning in life, life satisfaction and career construct, but it is related to the career self-efficacy construct (Sari, 2019). The path through which life satisfaction, meaning in life, and career indecision are related remains unexplored in the literature, with no study to our knowledge yet investigating the mediating paths between these variables.

However, several approaches to career guidance, such as the Life Design approach (Savickas, 2012), underline the importance for career practitioners to root their action in the support of the creation of a life project. Specifically, career decision should be guided by a reflexive process allowing the construction of personal meaning for one's life. Life satisfaction appears to play a central role in this dynamic. Reaching a satisfaction related to the way individuals see their life might play an informative role for career development. Students and workers who perceive themselves as satisfied of their life may also less likely develop doubts on their future career and reconsider their previous commitments. Recent approaches to career decisions (Fusco, 2022), analyzing past literature on career have proposed to use Life Satisfaction as a criteria to assess the success of career interventions.

The current paper aims to verify these theoretical assumptions for Italian students.

1.1 Career Indecision

Making a career choice is among the most significant tasks of students (Gati & Levin, 2014). Super and Nevill (1984) introduced the concept of career readiness, defined as one's readiness for career decision-making, which proceeds into a series of stages and tasks during the lifespan. Guay and colleagues (2003) argued that career indecision is one primary career-related problem students should contend. Indeed, career indecision has been a significant focus of vocational research over the last few decades (Saka & Gati, 2007; Kelly & Lee, 2002).

Based on the decision theory (Gati, 1986; Pitz & Harren, 1980), Gati and colleagues (1996) proposed a taxonomy for career indecision. Starting from the causes of career indecision, Gati et al. (1996) split the difficulties into those that may arise prior to engagement in the career-decision-making process and those that may arise during the career-decision-making process. The taxonomy comprises three major career decision-making dimensions and ten specific categories. The first dimension, called Lack of Readiness, includes three difficulty categories that arise prior to engagement in career decision-making: (a) lack of motivation to engage in the process, (b) general indecisiveness, and (c) dysfunctional beliefs about career decision making. The second one, called Lack of Information, includes difficulties that typically arise during the career decision-making process: (a) the decision-making process, (b) the self, (c) occupations or careers, and (d) ways of obtaining information or help. Finally, the last dimension, called Inconsistent

Information, as the second category, includes difficulties that typically arise during the process: (a) unreliable information, (b) internal conflicts, and (c) external conflicts.

Career indecision was reported as a particular stressor for university students (Miller & Rottinghaus, 2014). According to Feldman (2003), making career decisions during university is a distinctive phenomenon among those under 30 years old because the decisions about which careers to pursue are intersected with other arrays of personal decisions which have to be made at the same time and which have long-lasting effects on their personal lives (e.g. decisions about money, decisions about leaving home and/or about starting new families).

Many studies have explored the antecedents and consequences of career indecision among young adults (Feldman, 2003; Kulksar et al., 2020). A recent integrative review performed by Bian (2021) classified the antecedents into individual factors, i.e. mental health disorder, personality and capabilities and contextual factors, i.e. family environment, perceived social support and political and social references.

In addition, career indecision may long-term affect individuals' career satisfaction (Gati et al., 2006) and well-being (Creed et al., 2005). The individual is called to face these difficulties by putting in place coping strategies (Lipshits-Braziler et al., 2016) and career adaptability (Savickas, 2012) to adjust to changes in the environment. Therefore, it is necessary to understand the intricate process of career decision making and help individuals to make better decisions at specific points of their life, for example, during university courses, when they can still consider several career alternatives.

A better understanding of career indecision and its predictors will provide a reference for designing interventions to attain career decision. Indeed, identifying the predictors of difficulties in career decision-making is one of the first steps in helping individuals overcome indecision (Gati & Levin, 2014; Xu & Bhang, 2019).

1.2 Meaning in Life

Among the different definitions of the meaning of life, it has been conceptualized as “the cognizance of order, coherence, and purpose in one’s existence, the pursuit and attainment of worthwhile goals and an accompanying sense of fulfilment” (Reker, 2007, p. 41). However, the core definition is the will to meaning (Frankl, 1963) which refers to an innate driving force to find meaning in our lives, and that failure to achieve it provokes psychological distress.

Starting from the major definitions of meaning, Steger and colleagues (2006, p. 81) proposed a definition of meaning in life concept as “*the sense made of, and significance felt regarding, the nature of one’s being and existence*”. Two different dimensions are referred to as meaning in life: “Presence of meaning” and “Search for meaning”. Presence of meaning refers to what extent a person finds or experiences meaning in his/her life. Search for meaning refers to what extent is a person searching for meaning in his/her life. These facets are not mutually exclusive: individuals who do not possess meaning in life may be searching for it, and individuals who do possess it may continue to search for a more significant and/or different meaning (Steger et al., 2011).

Studies showed a strong relationship between meaning in life and well-being (Ho et al., 2010, McMahan & Renken, 2011). Among healthy psychological functioning, more meaning in life has been related to life satisfaction (Joshanloo, 2019), and happiness (Li et al., 2019). Moreover, Savickas (2003) has noted the importance of meaning in life and meaning-related variables to career counseling. Making meaning in their lives seems to be a career counselling scope (Savickas, 2003; Maree, 2010).

1.3 Life Satisfaction

In a subjective well-being framework (Diener et al., 1999; Kahneman & Riis, 2005), life satisfaction refers to the cognitive evaluation of one's own life (Schalock & Felce, 2004). Life satisfaction has multiple facets, such as job, community, health, social life, and others. In this model, life satisfaction is associated with a broad range of positive outcomes during adulthood (Proctor et al., 2009).

Recent literature identifies the relationships between life satisfaction and career development (Larson, 2000; Lerner et al., 2009). Due to the importance of careers for individuals in the adult life span (Super, 1987), life satisfaction may be affected by experiences in career transitions (Lounsbury et al., 2004; Jaensch et al., 2015). Indeed, feeling a sense of career decision helps young people to be more satisfied (Nota et al., 2014; Parola & Marcionetti, 2020; Parola et al., 2022).

1.4 The Present Study

Based on the framework delineated above, the present study examined the indirect effect of life satisfaction on career indecision making difficulties through the presence of meaning in life.

We hypothesized the negative correlations between career indecision and life satisfaction and presence of meaning in life (H1), and that presence of meaning in life would fully mediate the relationship between life satisfaction and career indecision (H2).

2 Methods

2.1 Sample Size Determination

The sample size was determined a priori by considering the statistical analyses used in this study (see designated section). In particular, in line with previous studies (e.g., Rossi et al., 2020), the formula provided by Tabachnick and Fidell (2014) was used:

$$N > (50 + 8m).$$

Where N is the required sample size and m is the highest possible number of paths within the structural model equation (namely, the saturated model). Consequently, the final sample should have guaranteed at least 74 subjects.

2.2 Procedure

Participants were informed about a complete guarantee of confidentiality, the voluntary nature of participation, and their right to discontinue. The enrollment procedure was carried out through online advertising on social platforms. Participants voluntarily accessed the online platform used for data collection, and the respondents did not receive any payment for their participation.

Participants were considered eligible for participation if they met the following inclusion criteria: (A) were between 18 and 34 years and (B) were university students. Exclusion criteria were: (C) illiteracy and (D) inability to complete the assessment.

All participants signed informed consent. The questionnaire booklet took approximately 30 min to complete.

2.3 Participants

An initial sample of 180 participants was consecutively contacted. However, 16 participants were excluded from the study according to the abovementioned criteria. Consequently, the final sample was composed of 164 university students – 57 males (34.8%) and 107 females (65.2%) – aged between 18y.o. and 34y.o. ($mean = 23.26$; $SD = 3.44$) attending the Italian universities took part in this study.

Regarding the country of origin, 98.9% of participants were Italian (26.5% Northern Italy, 9.9% Central Italy, 63.6 Southern Italy and Islands).

Participants were bachelor (47.6%) and master or advanced studies students (52.4%) in various disciplines.

2.4 Measure

Demographic Information. Prior to completing the specific measures, participants completed a demographic questionnaire that contained brief questions regarding sex, age, race, regions, grade and course of university.

Career Indecision. Career indecision was measured with Career Decision-making Difficulties Questionnaire (CDDQ; Gati et al., [1996]) in the Italian-validated version (Fabio et al., [2013]). The instrument consists of 34 items that assess career indecision. Participants responded to each item on a 9-point scale (1 = does not describe me; 7 = describes me well) concerning how much the difficulty proposed by each item describes them.

CDDQ measures include three dimensions: Lack of Readiness (10 items, e.g. “It is usually difficult for me to make decisions”), Lack of Information (12 items, e.g. “I find it difficult to make a career decision because I do not know what factors to take into account”) and Inconsistent Information (10 items, e.g. “I find it difficult to make a career decision because I have contradictory data about the existence or the characteristics of a particular occupation or training program”), and two validity items. The total CDDQ score is defined as career indecision.

The difficulty category scores and the total CDDQ score are defined as the mean of the items. For this study, the total CDDQ was used. Cronbach’s reliability in the current sample was 0.72.

Meaning in Life. Meaning in life was measured with the Meaning in Life Questionnaire (MLQ, Steger et al., 2006) in the Italian-validated version (Negri et al., 2020). The MLQ was created to provide an empirical measure of one's sense of meaning in life. MLQ includes two dimensions: Presence of meaning (POM) and Search for meaning (SFM). For this study, only the Presence of meaning (POM) was administered. Precisely, POM measures the extent to which one experiences his/her life as meaningful (e.g. "My life has a clear sense of purpose"). The dimension comprises 5 items rated on a 7-point Likert scale (1 = not at all true; 7 = very true). The score is defined as the mean of the items. A higher score represents a greater sense of personal meaning in one's life. Cronbach alpha in the current sample was 0.88.

Satisfaction with Life. To assess satisfaction with life, the Satisfaction with Life Scale (SWLS; Diener et al., 1985) in the Italian-validated version (Negri et al., 2020) was used. SWLS reflects the cognitive components of one's satisfaction with life. The measure consists of 5 items (e.g. "The conditions of my life are excellent"), assessing the extent to which participants felt generally satisfied with one's life. Participants responded on 7-point scale (1 = strongly disagree; 7 = strongly agree).

The score is defined as the mean of the items belonging to them. A high score means a high-level perception of life satisfaction. Cronbach alpha in the current sample was 0.84.

2.5 Data Analyses

Statistical analyses were performed with R software (R core team, 2017) and the following packages: lavaan (Rosseel, 2012), corrplot (Wei & Simko, 2017) and graphViz via DiagrammeR (Iannone, 2018).

To investigate the negative relationship between career indecision and life satisfaction and the presence of meaning in life (H1), Person's correlations were performed.

To test the hypothesis that the presence of meaning in life would fully mediate the relationship between life satisfaction and career indecision (H2), a mediation analysis with observed variables (path analysis) was computed (Hayes & Preacher, 2003) with a 5,000 bootstrap resampling procedure. The mediation analysis allowed testing whether the indirect effect of the presence of meaning in life mediates the effect of life satisfaction and career indecision with the bootstrapping confidence interval. Considering the score distribution of measured variables, the maximum likelihood (ML) estimator was used to conduct the following statistical analyses. In line with previous studies (Rossi et al., 2021), a 2-step approach was followed (Hayes & Preacher, 2013, MacKinnon, 2012).

STEP1: A predictor-only model was specified: the 'satisfaction with life' (X) was regressed on 'career decision making' (Y).

STEP2: the full mediation model was specified: the 'satisfaction with life' (X) was regressed on 'career indecision' (Y) through 'presence of meaning in life' (see the Fig. 1).

All the reported regression coefficients were unstandardized (β).

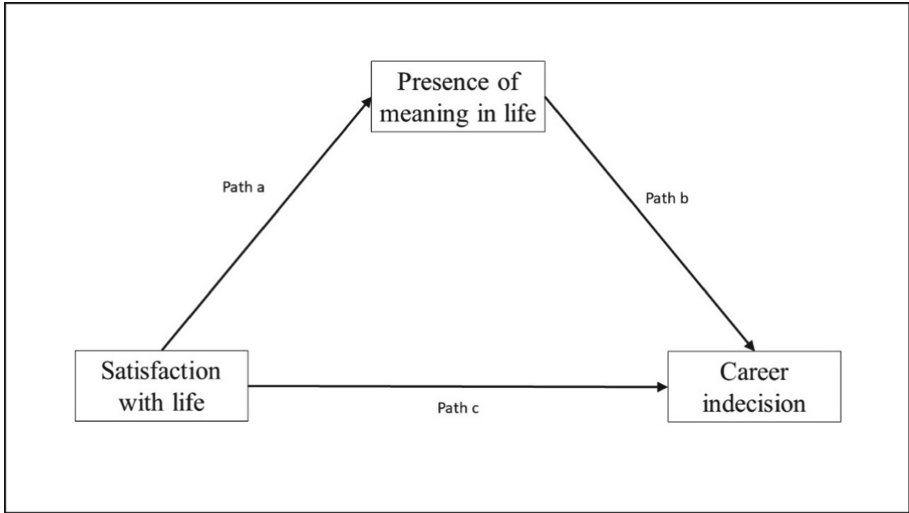


Fig. 1. Statistical Diagram

3 Results

3.1 First Hypothesis

Figure 2 provides supportive discriminant validity evidence. A significant but moderated level of correlation existed among variables (H1). Satisfaction with life demonstrated a positive correlation with the presence of meaning in life ($r = .524$; $p < 0.001$) and a negative relationship with career indecision ($r = -.321$; $p < 0.001$). The presence of meaning in life demonstrated a negative relationship with career indecision ($r = -.479$; $p < 0.001$). No significant correlations between age and other variables were found.

3.2 Second Hypothesis

A mediation analysis was conducted to build up and understand clearly the effect of satisfaction with life on career indecision and the role of the presence of meaning in life on the relationship (H2).

The mediation path analyzed whether satisfaction with life influenced career indecision and tested whether the presence of meaning in life mediated the effect of satisfaction with life on career indecision (Fig. 1). This research employed the bootstrapping mediation test for the analysis, which provided the indirect effect.

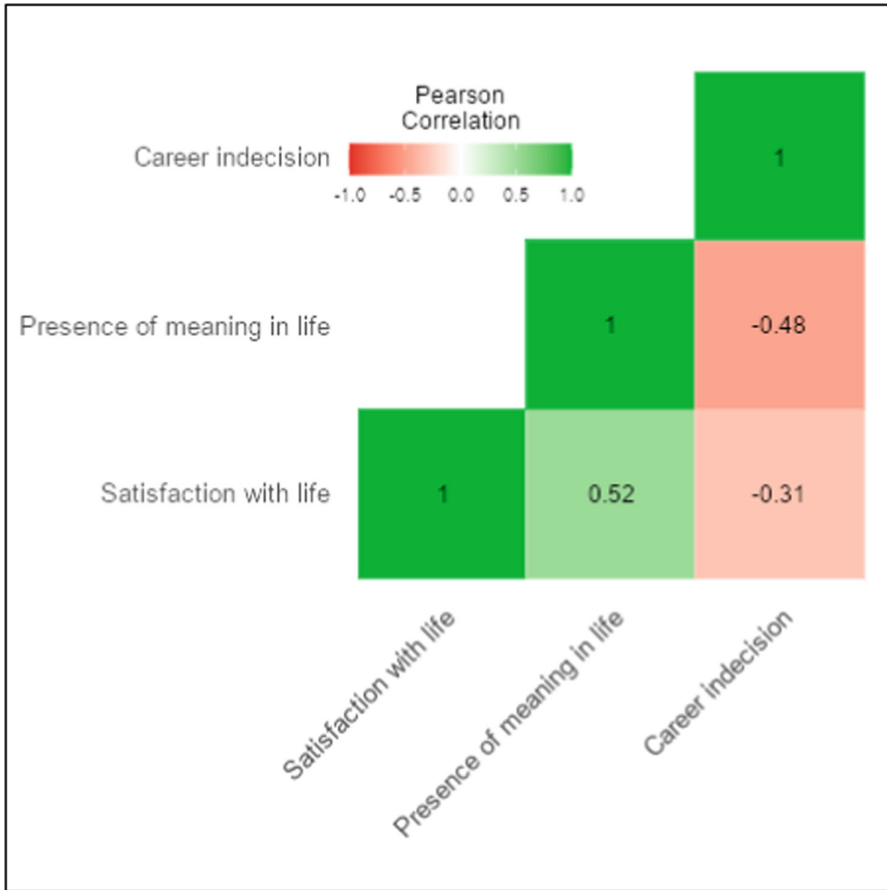


Fig. 2. Correlation heatmap

The direct effect (Fig. 3 and Table 1) indicates that individuals who feel meaning in life are likely to experience less difficulty in the career decision-making process ($\beta = 0.369$, $SE = 0.0688$, $p < 0.001$). Moreover, individuals who experience satisfaction with life are likely to feel meaning in life ($\beta = 0.535$, $SE = 0.068$, $p < 0.001$). No direct effect between satisfaction with life and career indecision was found ($\beta = -0.073$, $SE = 0.070$, $p = 0.298$).

Bootstrapping analysis indicates that the indirect effect was significant ($\beta = -0.2712$, $SE = 0.0648$, $p < 0.01$, $CI [-.279, -.125]$). The full mediation test supports the proposed H2.

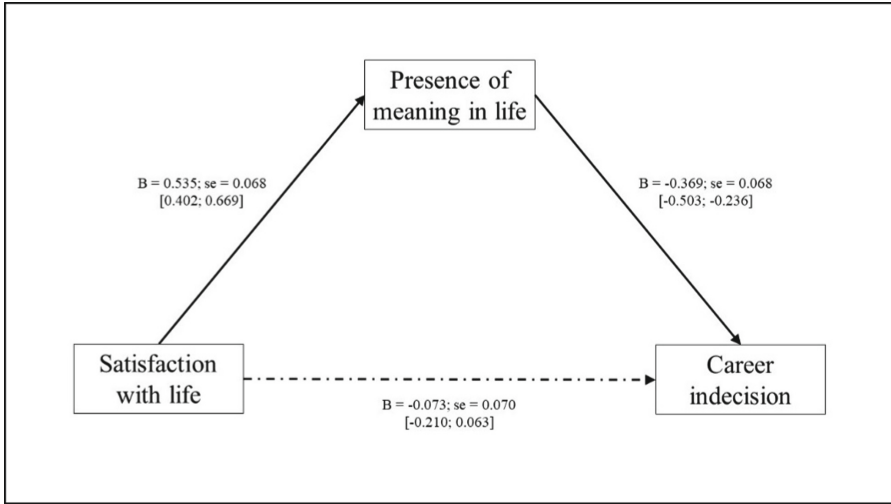


Fig. 3. Mediation model

Table 1. Direct and total effect of satisfaction with life on career indecision via presence of meaning in life

	B	se	95%CI[L-U]	β	z
Path a	0.535	0.068	[0.402; 0.669]	0.524	7.87*
Path b	-0.369	0.068	[-0.503; -0.236]	-0.435	-5.42*
Path c'	-0.073	0.070	[-0.210; 0.063]	-0.084	-1.05§
Total effect	-0.271	0.065	[-0.398; -0.145]	-0.312	-4.20*

Note: * $p < 0.001$; § $p > 0.050$ ns; B 0 unstandardized regression coefficient, se = standard error; 95%CI = confidence interval at 95%; β = standardized coefficient; z = z value

4 Discussions

The present study focuses on the relationship between life satisfaction, presence of meaning in life and career indecision. This study aims to strengthen the existing research literature on university students' career decision-making processes, focusing on the relationship with meaning in life.

Although several studies have explored the link between life satisfaction and career indecision (Jaensch et al., 2015), few studies have explored the relationship between meaning in life and career indecision. For example, Miller and Rottinghaus (2014) proposed an existential framework considering the role of anxiety, meaning in life, and career indecision.

In light of this, the present study considers the interplay between career concepts, such as career indecision, and two key concepts of positive psychology, such as life satisfaction and meaning in life. Moreover, this study aims to understand the pathway through which life satisfaction and meaning in life could promote career decisions.

First, we hypothesized the negative relationship between career indecision and life satisfaction and presence of meaning in life (H1). Second, we hypothesized that presence of meaning in life serves as a mediator between life satisfaction and career indecision (H2). According to the result of the study, there were significant negative correlations between presence of meaning in life and career indecision and between satisfaction with life and career indecision. Moreover, a positive correlation between presence of meaning in life and life satisfaction was found. These findings are in line with our hypothesis. The evidence of the relationship between meaning in life and career indecision supports the experience of meaning as important in the career choices processes. Consistent with the previous studies (Miller & Rottinghaus, 2014; Sari, 2019), this result confirms that students aspire that their careers provide a sense of fulfillment and contribute to an increased experience of meaning in life (Miller & Rottinghaus, 2014).

In line with the second hypothesis, mediation-model analysis supported the notion that the presence of meaning mediates the relationship between satisfaction with life and career indecision. In other words, the presence of meaning in life may be part of the mechanism by which an individuals' life satisfaction affects his or her level of career indecision. Therefore, this evidence can be an optimal guide for career intervention because it underlines the key role of meaning in life to coping with the career decision making process.

Some limitations of our study must be acknowledged. Firstly, the sample is not gender-balanced. Future studies will consider age and gender differences in the dimensions explored. Secondly, 63.6% of participants were from Southern Italy and the Italian Islands. The study needs to be replicated in areas with different neighborhoods characteristics. Thirdly, the study did not consider the search for meaning in life in comparison to the presence of meaning in life (Steger, 2009). Future research should explore what role the search for meaning plays in the career decision-making processes. Finally, the future investigation may use a longitudinal design to explore how this pathway is manifested over time and how the presence of meaning in life is related to career choices over the life span.

Despite the limitations, this study opens potentially important avenues for future implications. First, our findings underline the importance of career counseling interventions based on meaning in life. Savickas (2003) suggests the importance of meaning in life and meaning-related variables to career counseling. Enhancing meaning in life allows young people to better manage the career decision-making process. Moreover, it would be desirable that the interventions do not occur when the young people are already close to the choice (Fusco et al., 2021; Fusco et al., 2022; Parola & Marcionetti, 2020). In conclusion, career practitioners should work with young counselees to improve the meaning of life because it is a resource in the career decision-making process.

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