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# The role of career adaptability and courage on life satisfaction in adolescence



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#### ARTICLE INFO

# ABSTRACT

Keywords: Adolescents Career adaptability Courage Life satisfaction Life design paradigm The present study aimed to extend understanding about the relationship between career adaptability, courage, and life satisfaction in a sample of Italian adolescents. It was hypothesized that courage partially mediated the relationship between career adaptability and life satisfaction. Specifically, 1202 Italian high school students with an age from 14 to 20 years (M=16.87; SD=1.47), of which 600 (49.9%) boys and 602 (50.1%) girls, were involved. Using a multigroup approach across gender, it was found that courage partially mediated the relationship between career adaptability and life satisfaction in boys and girls. Results suggested the relevance of career interventions to promote career adaptability and courage for strengthening life satisfaction in adolescence.

Western European societies are characterized by fast modification of work environments, rapid technological changes, economic and social insecurity and instability, unemployment, due notably to the worldwide financial crisis, globalization, and migration flows. As a result of these social phenomena, adolescents tend to perceive their future to be full of risks (Schoon, 2007), and thoughts about the future constitute one of the main fears and concerns among other domains (e.g., relationships with parents and peers). Adolescents can experience anxiety and distress about the future, that might affect their psychological health and their levels of life satisfaction, so that Lange (2013) highlighted that job insecurity, as the perceived risk or fear of future unemployment, has a detrimental impact on personal well-being. This perception may occur especially among adolescents in countries such as Italy, where the rate of youth unemployment and precariousness is higher than other EU countries (EUROSTAT, 2016).

The Life Design, developed primarily to help individuals to construct their career life in the current changing societies, is a paradigm for career counseling based on the epistemology of social constructivism and considers career development as the result of a dynamic interaction of person and environment. It stimulates persons to reflexively imagine and construct a life arranged with viable and multiple roles to guarantee well-being and adaptive functioning (Savickas, 2015). Central to the life design paradigm is the concept of career adaptability, that is an essential resource to help individuals plan their uncertain future, face adverse working conditions, adapt to changes of the job market and job conditions, and therefore increase their well-being (Savickas, 2015). In this current socio-economic context, particular relevance is also given to the propensity of individuals to behave courageously and persist despite perceived risks (behavioral courage), as this resource seem to be a strength when making difficult career choices despite fears

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related to the future, and a resource related to personal well-being (Bockorny, 2015; Ginevra & Capozza, 2015). Based on these premises, the constructs of career adaptability and behavioral courage and their relationship to life satisfaction are below examined.

#### 1. Life satisfaction

Life satisfaction is described as a subjective component of quality of life. It is considered as the cognitive dimension of subjective well-being, that is the conscious cognitive judgment of own life in relation to a series of personally set criteria (Schalock & Felce, 2004).

Although life satisfaction has been studied extensively in adults (Diener, Suh, Lucas, & Smith, 1999) and less extensively in adolescence (Huebner, Suldo, Smith, & McKnight, 2004), it has been found that having a positive cognitive judgment of own life is positively related to better emotional, social, and behavioral health (Sun & Shek, 2013), enhanced social relationships, and increased academic engagement and achievement (Lewis, Huebner, Malone, & Valois, 2011; Suldo, Thalji, & Ferron, 2011). The relevance of life satisfaction during adolescence has been shown by longitudinal research (e.g. Suldo & Huebner, 2004) founding that life satisfaction negatively influences future externalizing behaviors in the face of stressful life events and therefore operates as a buffer against some effects of adverse life events.

#### 2. Career adaptability

Career adaptability is a self-regulatory, transactional, and flexible competency for coping with developmental tasks, present and future changes in the career context, promoting adjustment and successful transition across the career lifespan (Rossier, 2015; Rudolph, Lavigne, & Zacher, 2017). It is characterized by four Cs: Concern is the individual ability to connect past with present and to be positively projected toward the future. Control is the tendency to think of the future as manageable. Curiosity refers to the exploration of possible selves and social opportunities. Finally, Confidence allows for standing by one's own aspirations and objectives despite difficulties (Savickas & Porfeli, 2012). Overall, career adaptability promotes individual's ability to tolerate and handle uncertainty and to cope with and organize educational and career future-fears (Rossier, 2015). As found by Pouyaud, Vignoli, Dosnon, and Lallemand (2012) career adaptability is negatively correlated with fear of failing in one's academic or professional career and positively correlated with school motivation, suggesting that adolescents with higher levels of career adaptability perceive themselves as more engaged with their future and less afraid to fail in achieving their future goals.

A meta-analysis by Rudolph et al. (2017), based on the career construction model of adaptation (Savickas & Porfeli, 2012), and using 90 studies across several countries, found that career adaptability, directly and indirectly through the role of adapting responses (adaptive behaviors and beliefs to handle career development tasks and changing career conditions), predicted positive career related outcomes (adapting results). These adapting results refer for example to career decidedness (Ginevra, Pallini, Vecchio, Nota, & Soresi, 2016), broader range of career interests and fewer internal and external barriers (Soresi, Nota, & Ferrari, 2012), and subjective well-being (Rudolph et al., 2017). Regarding this latter, Santilli, Marcionetti, Rochat, Rossier, and Nota (2016) provided support of the relationship between career adaptability and life satisfaction, that was partially mediated by a positive orientation toward future (hope and optimism) in 12–16 years old Italian adolescents and fully mediated in Swiss adolescents. Moreover, Buyukgoze-Kavas, Duffy, and Douglass (2015) observed that all four dimensions of career adaptability correlated with life satisfaction; and career concern and control linked to life satisfaction through the role of sense of control in career decision making and life meaning.

#### 3. Courage

Although traditionally courage has been portrayed as a trait or a stable disposition, recent several approaches have considered it as a type of act or behavior. Norton and Weiss (2009) defined courage as the persistence despite having fears that is the perpetuation of effort despite the subjective feeling of fear. According to Rate, Clarke, Lindsay, and Sternberg (2007), four primary features of a courageous behaviors are: (1) intentionality; (2) deliberation; (2) coping with warning, risk, or obstacles; (3) a noble or worthwhile purpose. Unlike trait courage, behavioral courage is malleable and affected by other constructs and dimensions. For example, Hannah, Sweeney, and Lester (2010) posited that courageous behavior is impacted by a series of personal strengths and resources (e.g., resilience, optimism, hope, openness to experience), social forces (e.g. normative influences), and personal values and beliefs (e.g. loyalty, valor) that reduce the fear experienced and/or increase the likelihood that the individuals behave courageously despite fears.

Recent studies have begun to examine the role of behavioral courage on career related outcomes, suggesting that courageous behaviors influence positive work behavioral outcomes, personal identity, prosocial behaviors (e.g., Howard, Farr, Grandey, & Gutworth, 2016; Koerner, 2014). Additionally, it has been found that adolescents with higher levels of courage are likely more motivated to reach their plans and to think and implement different solutions for achieving them, have more coping skills to achieve them, reducing the feeling of fear (Ginevra & Capozza, 2015; Magnano, Paolillo, Platania, & Santisi, 2017). Although few studies have been conducted on the relationship between courage and life satisfaction, it was found that courage, beyond psychological capital (hope, optimism, resilience, and confidence), positively contributed to life satisfaction, as a dimension of the entrepreneurial success (Bockorny, 2015).

### 4. Research goal

Based on Life Design approach, this study aimed at analyzing the mediating role of courage on the relationship between career adaptability and life satisfaction. Only an exploratory cross-cultural study has currently examined the relationship between career adaptability and courage, founding that career adaptability positively and significantly predicted courage across three samples of French, Greek, and Italian adolescents (Sovet, Annovazzi, Ginevra, Kaliris, & Lodi, 2018). Moreover, according to Savickas and Porfeli's (2012) model and Rudolph et al.'s (2017) findings, career adaptability is, directly and indirectly through the role of adapting responses, related to life satisfaction (adapting results). Hannah et al.'s (2010) model conceptualizes courageous behavior as malleable and influenced by a series of personal strengths and resources, and Bockorny' (2015) study found that courage is positively related to life satisfaction. Taking into account these theoretical models and findings, it was hypothesized that career adaptability, directly and indirectly through the mediating role of courage, was positively linked to life satisfaction. Therefore, it was expected that courage partially mediated the relationship between career adaptability and life satisfaction. Moreover, considering that the research findings about demographic characteristics on career adaptability (e.g., Rudolph et al., 2017), courage (e.g., Pury & Hensel, 2010), and life satisfaction (e.g., Al-Attiyah & Nasser, 2016) are not definitive, preliminarily, some demographic characteristics (age, gender, school type, community) were considered.

#### 5. Method

#### 5.1. Participants

For the current study, participants were 1202 Italian adolescents recruited between January and March 2016. Taking into account the Italian high school population proportions (about 54.6% of students attend lyceum, 30.3% technical schools, and 15.1% vocational schools) (The Ministry of Education, Universities and Research [MIUR], 2017), several high schools were involved, and of the participants, 639 (53.2) attended a lyceum, 379 (31.5%) a technical school, and 194 (15.3%) a vocational school. The students were 600 (49.9%) boys and 602 (50.1%) girls, with an age from 14 to 20 years (M = 16.87; SD = 1.47). Specifically, they were attending the 9th to 12th grade of high schools (14.9% 9th grade, 22.4% 10th grade, 23.3% 11th grade, and 11.3% 12th grade). Of these participants, 404 (33.6%) lived in North and 798 (66.4%) in South Italy. Substantial differences in socio-economic condition between the North and the South of Italy have been recorded since Italian Unification in 1861, with lower per capita gross domestic product (GDP) and higher unemployment rate in the South (Bigoni, Bortolotti, Casari, & Gambetta, 2017). As a consequence of the global economic crisis in the last decade, a growing gap between the North and the South Italy has been observed. According to regional development association Svimez, from 2008 to 2016, the South Italy's GDP sank 10.2%, compared to a 5.5% decline in the North Italy. Additionally, in 2015, the employment rate for individuals between 15 and 34 years was 27.4% in the South and 46.7% in the North Italy.

#### 5.2. Measures

# 5.2.1. Career adapt-abilities scale-Italian form (Soresi et al., 2012)

The Italian form of the Career Adapt-Abilities Scale-International Form 2.0 (Savickas & Porfeli, 2012), consisting in 24 items, was used to measure career adaptability. The scale is composed of four subscales to evaluate the level of Concern (e.g., "Planning how to achieve my goals"), Control (e.g. "Taking responsibility for my actions"), Curiosity (e.g., "Observing different ways of doing things"), and Confidence (e.g. "Solving problems"). The four subscales combine into a total score, providing an indicator of career adaptability. The five-point Likert scale ranged from 1 (not strong) to 5 (strongest). The Italian form of the instrument exhibited adequate Cronbach's alphas of 0.80 for concern, 0.74 for control, 0.77 for curiosity, 0.85 for confidence, and 0.92 for the total score. Moreover, as the Career Adapt-Abilities Scale-International Form 2.0, also a hierarchical structure of four subscales on the higher order factor of career adaptability was found (Soresi et al., 2012). For this sample Cronbach's alpha for four subscales were 0.74, 0.66, 0.69, and 0.78 respectively, and 0.86 for the total score.

## 5.2.2. Courage Measure-Reduced version (Norton & Weiss, 2009)

The Courage Measure is a 12-item scale assessing self-perceived courageousness, defined as perseverance despite fear. Four items are negatively worded (e.g. "I will not face something I fear, even if avoiding it will have a negative outcome for me") and eight are positively worded (e.g. "Even if I feel terrified, I will stay in that situation until I have done what I need to do"). The scale is a 7-point Likert scale from 1 (*never*) to 7 (*always*). The original scale of 12-item scale was reduced by Howard and Alipour (2014) to 6 items, removing reverse-coded items and items specifically mentioning the word courage. Based on Howard and Alipour' (2014) suggestions, we considered for the analyses only these 6 items. A previous international research, involving French, Greek, and Italian adolescents (Sovet et al., 2018) found for the Italian sample that the confirmatory factor analyses showed adequate fit indices, and an internal consistency estimate of 0.83, suggesting that the scale was well represented by the items and that could analyze a general self-perceived courageousness. For this sample, the Cronbach's alpha was 0.81.

#### 5.2.3. Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

The instrument has 5 items and assesses global life evaluation of the quality of one's life (e.g. "I am satisfied with my life"). Participants responded to each item on a scale from 1 (Strongly disagree) to 7 (Strongly agree). In a study executed to adapt and validate

the Italian version of the scale with adolescents, Di Maggio (2014) found a mono-factorial structure, accounting for 55.73% of the total variance and an internal consistency estimates of 0.80. In this study, Cronbach's alpha was 0.87.

#### 5.3. Procedure

All participants were involved in vocational guidance activities in their high schools. Before participating in the vocational guidance activities, they had to complete and to accept a consent and a privacy policy forms, in order to declare their free volition to participate. The students were free to decline the participation in every step of the research. Before starting the confidentiality of the answers, the purpose of the project and procedures were explained to all adolescents. About 98% of students in all high schools involved agreed to participate to the study.

The instruments were administered to small groups by career counsellors, and participants were asked to read the instructions for the questionnaires before each instrument and were informed that they would receive a personalized report of their results. According to the Italian legislation, this study has not been submitted to institutional ethical boards, but this study adhered to the ethical rules of the Italian Psychological Association and Italian Society for Vocational Guidance (SIO).

#### 5.4. Data analysis

#### 5.4.1. Preliminary analyses

Prior to testing the mediational model, a number of preliminary analyses were conducted. First, missing responses and skewness and kurtosis of all items were assessed. Second, the normality of distributions of career adaptability, courage, and life satisfaction was tested using Kolmogorov-Smirnov statistic. Third, the presence of floor and ceiling effects that avoid the detection of an improvement or decline in all dimensions, using the frequency of highest and lowest possible scores, was analyzed. Floor and ceiling effects were considered present if more than 30% of the respondents achieved the highest or lowest possible score in each dimension (Kane, 2006). Fourth, correlations were run to examine the relationship between career adaptability, courage, and life satisfaction. Fifth, *tests* and ANOVAs were computed to check if there were any significant across-group differences in career adaptability, courage, and life satisfaction according to gender, school type, school grade, and community.

#### 5.4.2. Mediational model

A two-step procedure was carried out, by using the software Lisrel 8.80 (Jöreskog & Sörbom, 2006). In the first step, based on the results of the preliminary analyses, we tested the measurement model using a multigroup approach to estimate the level of representation of the three latent variables on their respectively indicators. Specifically, we tested the configural invariance to verify if the basic model structure was equivalent among boys and girls; and the metric invariance to verify if the factor loading parameters were invariant across genders (Cheung & Rensvold, 2002). In line with Little, Cunningham, Shahar, and Widaman's (2002) approach, we used the item parcelling method to create the latent variables of career adaptability, courage, and life satisfaction as it results in a better model fit than using all items as indicators. Specifically, for the two unidimensional latent constructs of courage and life satisfaction we used the item-to-construct balancing technique, with factorial algorithm (Rogers & Schmitt, 2004), in order to get almost equal factor loading in each parcel. Firstly, the dimensionality of the two scales was assessed using a Principal Axis Factoring (PAF). Specifically, for the Courage Measure-Reduced version the one-factor solution accounted for 53.45% of total variance, and had loadings ranging from 0.40 to 0.79. For the Satisfaction with Life Scale, a one-factor solution was observed with 5 items accounting for 55.97% of total variance, and loadings ranging from 0.55 to 0.83. Secondly, all the items were assigned to three parcels for courage and two parcel for life satisfaction based on the magnitude of the factor loadings in PAF. For career adaptability, that is a multidimensional latent construct, we followed the internal-consistency approach by Kishton and Widaman (1994). This approach consists in forming parcels that reflect the factors as the grouping criteria. Specifically, we calculated the average of items of each subscale, creating four parcels.

The following indices were used to evaluate the goodness of fit of the model: the Satorra-Bentler Scaled Chi-square test, as it provides a correction to test statistics and standard errors when data are no normally distributed; (b) the Root Mean Square Error of Approximation (RMSEA), (c) the Comparative Fit Index (CFI), (d) the non normed fit index (NNFI), and (e) the Standardized Root Mean Square Residual (SRMR). A model was considered to have an adequate fit if RMSEA was below 0.08, CFI was 0.95 or more, NNFI was 0.95 or more, and SRMR was below 0.08. In addition, to report the evidence of invariance, we referred to the following criteria: (a) the multigroup model displays an adequate fit to the data; (b) the  $\Delta$ CFI test, when the differences in comparative fit index values between models are less than 0.01; (c) the RMSEA, when the differences between models are less than 0.015 (Byrne & van De Vijver, 2010; Cheung & Rensvold, 2002). As suggested by Byrne and van De Vijver (2010) and Cheung and Rensvold (2002), given that the chi-square statistic is sensitive to sample size, and that use of the  $\Delta$ CFI and  $\Delta$ RMSEA tests is increasingly supported, we used these tests to provide the more rational measure of model improvement than the traditional chi-square difference.

In the second step, we executed multigroup structural analyses to test the gender differences in the structural model. In this study, we hypothesized that career adaptability was positively linked to life satisfaction, directly and indirectly through the mediating role of courage. To evaluate the plausibility of our hypothesis, we tested the partial mediation model across two groups. As a competing structural model, a fully mediation model (only an indirect relationship between career adaptability and life satisfaction through the mediating role of courage) was also assessed. After choosing the baseline model, the measurement invariance across boys and girls was tested. Specifically, the factor loading parameters were constrained to be equal across two groups, and then structural paths of the model were constrained to be equal across boys and girls, in order to examine gender differences in the structural relations.

Table 1
Correlations among dimensions.

|                        | 2       | 3       |
|------------------------|---------|---------|
| 1. Career adaptability | 0.471** | 0.363** |
| 2. Courage             | _       | 0.342** |
| 3. Life satisfaction   |         | -       |

Note: \*\* p < 0.001.

To test the significance of the indirect effect we proceed to carry out asymmetric confidence intervals tests using PRODCLIN (MacKinnon, Fritz, Williams, & Lockwood, 2007). The PRODCLIN program was used as it is a program useful for calculating asymmetric confidence limits for the indirect effect on the basis of the distribution of the product, is more powerful and has more accurate Type I error rates than bias-corrected bootstrap in structural models with a single mediator (MacKinnon et al., 2007).

#### 6. Results

#### 6.1. Preliminary analysis

Preliminary analyses carried out showed satisfactory asymmetry and kurtosis values for all items ( $\leq$ 1), low missing rate (<1%), and adequate floor and ceiling effects for all dimensions (<30%). The Kolmogorov-Smirnov statistic showed no normal distribution ( $p_s>0.05$ ) for career adaptability, courage and life satisfaction. Therefore, the Satorra-Bentler Scaled Chi-square test statistic was used for assessing the model fit (Satorra & Bentler, 2001). As shown in Table 1, moderate correlations were observed among dimensions. Additionally, *t-tests* showed significant gender differences on Courage t(1200)=4.978, p<0.001; and Life satisfaction t(1200)=4.264, p<0.001. Specifically, boys showed higher levels of courage (Boys: M = 29.19; SD = 6.09; Girls: M = 27.38; SD = 6.53), and life satisfaction (Boys: M = 23.33; SD = 5.32; Girls: M = 21.99; SD = 5.61) than girls. No group differences about school type, school grade, and community were instead observed on career adaptability, courage, and life satisfaction. In relation to these preliminary results, the importance of distinguishing boys and girls when testing the mediational model hypothesized was considered and the invariance of the structural model across gender was further tested.

## 6.2. Measurement model

The configural measurement model had a very good fit SB- $\chi^2$ (48) = 91.068, RMSEA = 0.039 (CI<sub>90</sub> = 0.026-0.051), CFI = 0.992, NNFI = 0.988, SRMR = 0.033. The metric model (factor loadings to be equal between boys and girls) had also a very good fit SB- $\chi^2$ (54) = 108.189, RMSEA = 0.041 (CI<sub>90</sub> = 0.030-0.052), CFI = 0.990, NNFI = 0.986, SRMR = 0.042. Moreover, no significant fit changes were observed according to  $\Delta$ CFI test and  $\Delta$ RMSEA.

# 6.3. Structural model

The fit indexes of the partial mediated model and the fully mediated model were good across groups (see Table 2). However, using the  $\Delta$ CFI test, CFI changes were more than 0.01 between two models for two groups and, using the  $\Delta$ RMSEA test, an increase of RMSEA by 0.017 for girls was found. In addition, the partial mediation model showed a better fit for both groups, compared to the fully mediation model. Therefore, the partial mediation model as the final structural model was chosen and tested across two groups.

To evaluate whether each structural path coefficient was statistically different among gender, we proceed to carry out a multigroup SEM. Therefore, the factor loading parameters were constrained to be equal across two groups on the partial mediated model, showing a good fit SB- $\chi^2$ (54) = 107.998, RMSEA = 0.041 (CI<sub>90</sub> = 0.029-0.052), CFI = 0.990, NNFI = 0.986, SRMR = 0.047. Thus, as a next step, the structural paths of the model were constrained to be invariant across boys and girls. The results showed a good fit SB- $\chi^2$ (57) = 111.760, RMSEA = 0.040 (CI<sub>90</sub> = 0.029-0.051), CFI = 0.989, NNFI = 0.987, SRMR = 0.049, and no significant fit changes were observed ( $\Delta$ CFI < 0.01). Thus, no significant gender differences exist in the partial mediated model testing the direct and indirect relationship between career adaptability and life satisfaction through the mediating role of courage (see Fig. 1). The

Table 2
Summary of Model Fit Statistics.

| Group          | SB- $\chi^2$ | df | RMSEA | RMSEA (CI <sub>90</sub> ) | CFI   | NNFI  | SRMR  |
|----------------|--------------|----|-------|---------------------------|-------|-------|-------|
| Partial mediat | ed model     |    |       |                           |       |       |       |
| Boys           | 41.215       | 24 | 0.035 | 0.015-0.052               | 0.993 | 0.990 | 0.032 |
| Girls          | 50.016       | 24 | 0.043 | 0.053-0.059               | 0.990 | 0.985 | 0.033 |
| Fully mediated | ! model      |    |       |                           |       |       |       |
| Boys           | 57.194       | 25 | 0.046 | 0.031-0.062               | 0.987 | 0.982 | 0.047 |
| Girls          | 79.402       | 25 | 0.060 | 0.046-0.075               | 0.979 | 0.970 | 0.054 |

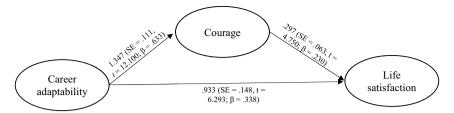


Fig. 1. Standardized and Unstandardized Coefficients in the Partial Mediation Model.

analysis showed that the coefficient for the relationships between career adaptability and courage was significant with a point estimate of 1.347 (SE = 0.111, t = 12.100;  $\beta$  = 0.633) and between courage and life satisfaction was significant with a point estimate of 0.297 (SE = 0.063, t = 4.750;  $\beta$  = 0.230). Moreover, the direct and indirect relationships between career adaptability and life satisfaction were significant with a point estimate 0.933 (SE = 0.148, t = 6.293;  $\beta$  = 0.338), and of 0.401 (SE = 0.085, t = 4.735;  $\beta$  = 0.140), respectively.

The 95% confidence intervals for the indirect effect between career adaptability and life satisfaction ranged from 0.228 to 0.586, supporting this indirect effect.

#### 7. Discussion

Our goal in this study was to extend understanding about the relationship between career adaptability, courage and life satisfaction, and in particular, to investigate the mediating role of courage on the career adaptability - life satisfaction relationship. Specifically, we hypothesized that courage partially mediated the relationship between career adaptability and life satisfaction in a sample of Italian adolescents. Using a multigroup approach across gender, our results confirmed the partial mediation, showing that career adaptability was linked, directly and indirectly through the mediating role of courage, to adolescents' life satisfaction.

The result of the significant positive direct relationship between career adaptability and life satisfaction is consistent with the career construction model of adaptation (Savickas & Porfeli, 2012) and the findings of the meta-analysis by Rudolph et al. (2017) showing that career adaptability is a relevant resource for strengthening personal well-being. This finding means that a successful adaptation to career tasks and transition may contribute to life satisfaction and positive life functioning more generally. A possible explanation may be that having high career adaptability resources in adolescence may stimulate perceptions of more possibilities and opportunities even in this complex social context, favoring a subjective well-being to cope with obstacles and to succeed in reaching the future goals (Konstam, Celen-Demirtas, Tomek, & Sweeney, 2015; Santilli et al., 2016).

The mediating role of courage on the relationship between career adaptability and life satisfaction extended the current understanding of the relationship between career adaptability and life satisfaction, suggesting that career adaptability was positively linked to the self-perceived courageousness, which in turn was positively linked to life satisfaction. Moreover, this finding emphasized that courage may be conceptualized as an adaptive behavior to cope with career development tasks and changing work and career conditions (an adapting response such as positive orientation towards the future, occupational self-efficacy; Santilli et al., 2016). One possible explanation is that adolescents with higher levels of concern about their future career, responsibility for their career development, curiosity and exploration of self and career opportunities, and self-efficacy in their ability to solve career-related problems, may perceive themselves to be more able to perform courageous behaviors in pursuing their future goals despite perceived obstacles and cope with risks related to their future, which may favor a more positive cognitive judgement of their life (Bockorny, 2015). The relationship between career adaptability and courage, in line with an exploratory international research, involving French, Greek, and Italian adolescents (Sovet et al., 2018), confirm the potential role of career adaptability in promoting positive psychological resources useful to handle challenging work contexts.

# 7.1. Implications for practice

The results carried out highlight the relevance of career interventions on career adaptability and courage, especially for adolescents with low levels, to positively impact on life satisfaction.

Regarding career adaptability, career counsellors could propose orientation activities to promote career concern, exercises of career decision making to promote career control, seeking-information activities to promote curiosity on self and the external environment, and use techniques such as modeling and vicarious learning to promote career confidence (Rossier, 2015). Besides individual career counseling, group life design interventions could be implemented for increasing the four career adapt-abilities. For example, with adolescents the training developed by Nota, Ginevra, Santilli, and Soresi (2014) can be realized, made up of 7 sessions of about 3 h each, focused on promoting a positive attitude about the future, mental open-mindedness, curiosity and creativity, career exploration, ability to identify career goals and self-efficacy beliefs to pursue own goals. Additionally, the one-day training intervention on career adaptability developed by Koen, Klehe, and Van Vianen (2012) could be implemented and adapted for adolescents.

Regarding courage, career counsellors could help adolescents to increase self-efficacy of handling the risk, emphasize the purpose of courageous behavior, and reduce their perception of risk (Pury et al., 2014). Specifically, self-efficacy beliefs in handling perceived risks can be promoted by using direct or vicarious models of peers who have succeeded in facing their fears related to the future and

in persisting to reach their future goals, and by helping adolescents recognize the previous successes reached in overcoming their fears. Career counsellors could also stimulate adolescents to examine the purpose of the courageous behavior by using the principles of utility of their future goals, and encourage them to discuss about their fears, to recognize any catastrophic fear, and to identify resources and strategies to overcome their fears (Pury et al., 2014).

#### 7.2. Limitations and future directions

This study has some limitations that must be taken into account. First, this study used a cross-sectional design with Italian adolescents that limits the generalization of the results carried out. Second, information on ethnic background and socio-economic status (SES) of participants has not been provided. Therefore future researches could consider these variables in order to verify whether these dimensions influence the perception of the impact of financial crisis on the quality of life and if the partial mediated model is confirmed with different groups or in conditions of disadvantage and vulnerability. Third, self-reported measures were used to assess career adaptability, courage, and life satisfaction and therefore results could be impacted by common method variance. Future researches could consider multiple methods in order to reduce the effect of bias associated to self-report, including parentreported variables or observational data. Fourth, about 24 adolescents (2%) did not agree to participate to vocational guidance activities realized in their high schools and therefore were not involved in this study. Therefore, future studies should consider how to involve these students. Additionally, future studies could test the conceptual model in older adolescents/emerging adults, and consider the role of perceived growing occupational uncertainties and perceived negative market changes on attitudes about the future and life satisfaction. Moreover, the role of other constructs such as hope, optimism, and resilience should be considered, as these variables are related to life satisfaction and could explain variance in life satisfaction not yet accounted for by the variables considered in this study. Future research in the framework of positive psychology could consider other positive outcomes such as positive affect, and happiness, which could mitigate against the development of psychopathological outcomes (e.g., depressive symptoms and anxiety).

#### 8. Conclusion

The current job market is characterized by phenomena such as unemployment, precariousness, and job insecurity, which could influence personal well-being (Van Vianen, Koen, & Klehe, 2015). This study provided a contribution to literature about the role of career adaptability and courage on adolescents' life satisfaction. Specifically, it highlighted career adaptability and courage as relevant resources for strengthening life satisfaction in adolescence (Bockorny, 2015; Rudolph et al., 2017), and emphasized the mediating role of courage on the relationship between career adaptability and life satisfaction. These results suggested that considering oneself able to construct own future career intentions and to handle career transitions may favor the tendency to execute intentional acts to pursue own future goals despite perceived obstacles and risks related to their future, and these dimensions positively are linked to life satisfaction.

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