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How Do Creativity and Social Support Affect the Resilience of Mediterranean University Students? A Cross-National Study in the Post-Pandemic Period

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Abstract: After the spread of the COVID-19 pandemic, several articles have described the fragility of young adults, such as students, highlighting the severity, frequency, and nature of mental distress. However, less research has examined the resources of young people, such as their creative competence and their ability to draw on a social network. Furthermore, the analysis of these resources is not very common in international comparative studies. The main aim of this cross-national study is to investigate whether creativity factors such as creative personality and divergent thinking together with social support predict resilience in college students, controlling for gender and nationality, in a sample of college students from Italy and Spain, European Mediterranean countries particularly affected by the pandemic. The following instruments were used to measure these constructs: The Creative Personality Scale, the Runco Ideational Behavior Scale, the Multidimensional Scale of Perceived Social Support, and the Connor Davidson Resilience Scale. A total of 287 college students participated, 147 from Italy and 140 from Spain, with an average age of 22 years. The results show that there are statistically significant differences between Italian and Spanish students for all variables except resilience. The hierarchical regression shows that divergent thinking and social support are predictors of resilience for the whole sample. In light of these results, it may be important for universities to continue investing in divergent thinking and social support through workshops and activities to promote student resilience.

Keywords: emerging adults; creativity; social support; resilience; university students; COVID-19



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1. Introduction

The COVID-19 pandemic has affected almost all aspects of economic, social, and political life, and various European countries have quickly issued a series of health protection decrees and opted for a phase of total lockdown. Studies conducted since 2020 (e.g., [1–5]) have shown that the lockdown has had a significant negative impact on the well-being and mental health of the most vulnerable population groups. The special population group of emerging adults, such as university students, was already at risk before the pandemic: The incidence of emotional disorders, anxiety symptoms, and depressive symptoms was higher in adolescents and young adults than in adults and children [1,5]. During the pandemic, which was characterized by uncertainty [6] and loneliness [7], one of the few resources was the use of creativity [8]. This can be seen as a potential protective factor for the individual as well as for interpersonal resilience during prolonged periods of isolation [9]. People with greater creative potential in everyday activities have higher resilience [10]. Since the outbreak of the pandemic, everyday creativity has improved: individual and social resources such as flexibility, divergent thinking, and problem-solving skills have been used to cope with the pandemic in everyday life in creative and innovative ways [11]. The role of social

relationships as predictors and mediators of resilience processes is also important in the scientific literature. Studies [6,12] suggest that the presence of an extended social network during COVID-19 was associated with lower levels of general stress and worry, reduced the negative effects of stress, and facilitated adaptation after traumatic experiences [13]. Based on these premises, there is still a lack of studies that have investigated the relationship between creativity, resilience, and social support in the post-pandemic period, especially in young adults. The present study aims to investigate, through cross-national research, the relationships between social support, creativity factors, and resilience in the post-pandemic period and, in particular, the predictive value of creativity factors in relation to resilience among European university students.

1.1. Sustaining Resilience by Fostering Creativity and Strengthening Social Support

According to Kaufman and Sternberg [14], creativity is the ability to produce a work that is new and of high quality but also useful or appropriate to the task or discipline in question. We now know that it is a human ability that is necessary for managing change, invention, and innovation to meet the challenges of our increasingly complex society [15]. These considerations now lead us to a dynamic view of creativity, which results from the interaction between the person, the environment, and the task. The focus can thus be on one of the three components, and regardless of which is the central element or starting point of the analysis, the other two elements act as moderators that need to be taken into account for a complete understanding of creativity [16]. Walia [17] defines it as follows: "Creativity is an act arising out of a perception of the environment that acknowledges a certain disequilibrium, resulting in productive activity that challenges patterned thought processes and norms, and gives rise to something new in the form of a physical object or even a mental or an emotional construct" (p. 7).

Several studies described the link between creativity and resilience. Everyone's creativity, whether in the form of personality traits, divergent thinking, or problem-solving skills, is closely linked to resilience, as it can generate diverse ideas, be innovative, evolve easily, and, above all, adapt to the environment [18]. Many studies, such as those by Metzl and Morrell [10], Fernández-Díaz et al. [19], and McFadden and Basting [20], explore the links that exist at a theoretical level between creativity and resilience, focusing on the practical implications in clinical and research settings. The few studies that have looked at creativity in the early phase of the pandemic suggest that the period of isolation fostered everyday creativity [21,22] and that creative skills helped people to cope better and improve their well-being [23].

Social support is one of the resources available to people to cope with perceived stressful life events [24]. Given the social constraints caused by the pandemic, recent research has shown that university students in 2020 reported significantly lower levels of social connectedness than before the pandemic [25]. Social support, defined as the extent to which one perceives emotional and instrumental support in personal relationships [24], is also considered a protective factor. In this context, perceived social support is a factor that facilitates people's adaptation and is a resource for their resilience [12]. Despite these findings, there are only a few studies that have investigated the relationship between social support and creativity. Most of these studies focus on the well-being of employees (e.g., [26]). Only a few studies focus on young adults and confirm that social support increases creativity [27]. However, there is still little literature, especially for the period after the pandemic. At the same time, social isolation due to lockdowns has a negative impact on mental health, as the way people interact with each other changes drastically [2].

To our knowledge, there are no studies that have examined the predictive power of creativity—as a creative person, as a creative thinking process, and as a problem-solving ability—on university students' resilience in stressful situations, such as post-pandemic, and few studies have examined the relationship between social support and creativity in emerging adults.

1.2. Emerging Adults in Italy and Spain: Young People in Mediterranean Europe

Italy and Spain, in particular, went through the pandemic phase with a number of similarities in terms of timing and modalities. However, even before the pandemic, the two countries shared a number of socio-cultural similarities that are consistently considered in the literature to be typically Southern European or Mediterranean [28]. Italy, Spain, Portugal, and Greece are the nations that belong to Southern Europe and are characterized, for example, by the central role of the family, which, however, is not always accompanied by adequate policies, especially compared to Northern European countries [29]. These are some of the similarities that Italy and Spain have at a socio-economic level, but there are also similarities in the field of higher education. Thus, there are no particular differences between Southern European countries in terms of critical aspects of the higher education system: underfunding by the government, low public funding for research, and the mismatch between higher education and the demands of the labor market [30]. In such an education and work scenario, young adults in the Mediterranean region will be confronted with the pandemic. The consequences will be significant, especially for university students, as they are particularly vulnerable in the time of crisis. Over the last 4 years, several articles have analyzed the mental health status of emerging adults [31–33]. A significant decline in life satisfaction and mental health compared to pre-pandemic levels has been identified. Limited contact with peers, financial pressure, and returning to the parental home acted as risk factors, while social integration, having an intimate partner, and self-efficacy were protective factors [32]. The most common stress factors were loss of routine, lack of social contact, and financial problems [33]. Respondents reported a significant increase in depression and anxiety. Stronger bonds with others were significantly related to lower severity of depression and anxiety during the pandemic, so social support appears to be a protective factor [31]. It was also found that students engaged slightly but statistically significantly in creative activities during pandemic isolation, despite the depressed mood. This has opened up interesting avenues of research into the possibility that creativity may be a resource that supports resilience even when mood is depressed [22,34].

University students belong to the age group referred to as "emerging adulthood", defined by Arnett [35] as a transitional period in life when the phases of identity formation, career, and relationships are prolonged. It is, therefore, a time of opportunity [35], but for some, it is also a delicate and particularly turbulent time, fraught with difficulties. Studies on the physical health of young adults show that the impact of COVID-19 in this age group is less severe than in older adults, with a lower incidence of infections and deaths [36]. At the same time, however, several studies show that young adults are more likely to suffer from depression, anxiety, and lower life satisfaction than other age groups [37]. In Southern Europe, in particular, the impact on mental health is greater compared to adults and older people [2]. Social alienation and limited mobility, key features of isolation, reduce the time young adults can spend with family and peers, which impairs social integration. The lack of opportunities and interpersonal contact and the lack of adequate support have increased the prevalence of loneliness, depression, and anxiety among young adults worldwide [2,3,38]. Thus, the data confirm a significant decrease in life satisfaction among young adults and a significant increase in mental health problems compared to pre-pandemic levels. However, the literature on emerging adults in the last 2 years has focused on psychological distress and neglected the study of emergent resources: everyday creativity factors and perceived social support and how these resources play a role in resilience processes.

1.3. The Present Study

Most studies conducted since the beginning of the pandemic have looked at university students because they represent an easier sample to survey than younger students, who are less accessible via online surveys, in part because they are minors and require informed parental consent. These studies have primarily focused on describing the most common disorders and difficulties experienced by this target group during the pandemic [3,36,38]. There is a lack of studies that have examined the resources of university students during

the pandemic in terms of the relationship between creativity and social networks. The few existing studies examined only some topics, such as coping strategies [39] and the effects of emotion regulation [40]. Most of these studies were conducted with university students from North America [38] or from across Europe [41,42], but not specifically with Mediterranean students. Several comparative studies have investigated the well-being and discomfort of students during their studies [43], but only in a few cases have comparative studies been conducted between European countries [44]. In the post-pandemic period, studies on Mediterranean countries such as Italy and Spain are mostly socio-economic or health-related (e.g., [45,46]), and few address the psychological well-being of vulnerable groups [47,48]. Furthermore, to our knowledge, none of these studies have focused on the relationship between creativity, social support, and resilience in university students.

The main aim of this cross-national study is to investigate any differences between Italian and Spanish university students in the relationship between creativity factors, social support, and resilience [12,19,26,49] and to examine how creativity factors and social support predict resilience differently depending on the country. In summary, this study aims to answer the following questions: (1) Are there differences in creativity factors, social support, and resilience between university students in Italy and Spain? (2) Do the studied creativity factors (personality attributes and divergent thinking) and social support predict the resilience of university students in the post-pandemic period, taking into account gender and nationality?

2. Method

2.1. Participants

A total of 287 university students took part, 147 of them from northern Italy and 140 from northern Spain. The average age of the sample was 21.84 years old (age range = 19–25 years old; SD = 2.00), including 22.67 years old (age range = 19–25 years old; SD = 1.76) for the Italians and 20.96 years old (age range = 19–25 years old; SD = 1.87) for the Spaniards. The majority of the total sample was female (75% evenly distributed between the two countries). The university students who participated in the study at the time of data collection were enrolled in various degree programs such as psychology, education, economics and law, science subjects, and language and communication. At the time of data collection, only 2% of the sample were part-time students, and 23% were working students. A total of 70% of students lived with their family of origin, and the rest lived with a partner (2%), in a shared flat (24%), or alone (6%). In the Italian sample, unlike in the Spanish sample, a large proportion of students lived outside the home, i.e., either alone or with roommates [50].

2.2. Procedure

The students completed an online questionnaire that collected socio-demographic data and the variables presented in the Measures section. Online distribution took place via the university's social media network. Students were invited to complete the questionnaire via an email distributed through the university offices in the Italian region of Piedmont and in the Spanish region of Asturias. Students took part in the project voluntarily, regardless of their affiliation to a particular degree program or age of enrollment. Only students at the first two university levels (Bachelor's and Master's) were selected for the study. The questionnaire was administered to participants in spring 2022. The study was conducted in accordance with the Code of Ethics of the World Medical Association (Declaration of Helsinki), which reflects the ethical principles for research with human subjects [51]. After participants signed the informed consent form to participate in the study, they voluntarily completed the questionnaire in about 20 min. All data was collected anonymously in accordance with research ethics regulations. The protection of personal data is guaranteed by specific legislation (Legislative Decree 101/18, 679/2016, General Data Protection Regulation) and the researchers responsible for the research project. Furthermore, this study

was approved by the Bioethics Committee of the University of Turin on 15 April 2020 (and its subsequent amendments) under protocol number 157942.

2.3. Measure

All students who participated in the study answered an online questionnaire, which was completed in Italian or Spanish. The questionnaire included the validated scales to measure the study variables and a section with socio-demographic information such as gender, age, course of study, and cohabitants during the pandemic and at the time of data collection. The data collection took place in spring 2022. The dimensions considered in the study were creativity factors, social support, and resilience. The questionnaire was completed in the native languages of the samples, Italian and Spanish. Validated or currently validated versions in the respective national languages were used for each scale. The scales used have been tested and validated in previous studies with samples of university students.

2.3.1. Creative Personality Attributes

The Creative Personality Scale (CPS [52]) was used to measure creative personality traits. It is a reliable scale that has multiple forms of validity and significant correlations with other measures of creativity [53]. The CPS is a 30-item self-report scale that includes 18 positive attributes of creativity (such as originality, inventiveness, and humor) and 12 negative attributes of creativity (such as being conservative and submissive). Participants are asked to select all the attributes that best describe them. They receive 1 point for each positive attribute and -1 point for each negative attribute. The total score ranged from −12 to 18. The reliability of the Gough scale was calculated using a weighted composite procedure. The 30 adjectives were divided into two subscales: a positive subscale with 18 adjectives describing highly creative people (e.g., original, unconventional, resourceful) and a negative subscale with the 12 adjectives associated with less creative people (e.g., conservative, cautious). Two Cronbach's reliability coefficients were calculated, one for each of these subscales (alpha+ and alpha-). Finally, the reliability of the overall Gough scale index was calculated using a linear combination weighted by the number of items from each subscale and the correlation between the subscales. In this study, the Cronbach's α value was 0.70, slightly lower than in other studies in which it has been measured [52].

2.3.2. Divergent Thinking

The RIBS (Runco Ideational Behavior Scale) is a self-report measure for evaluating creative ideas [54,55]. It is called a behavioral scale because, whenever possible, the items describe actual, overt behavior that clearly reflects the person's use, appreciation, and skills in dealing with ideas [55]. A number of studies have shown that the RIBS is useful as a criterion for original and divergent thinking. The short form consists of 23 items (e.g., "I have many wild ideas"), each of which requires respondents to indicate the frequency of occurrence of each item on a scale from 1 (never) to 5 (very often). Runco et al. [56] reported evidence of reliability and construct validity. In this study, the Cronbach's α value in our study was 0.77, as in other previous studies.

2.3.3. Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS [56]) is a validated scale consisting of 12 items that measure perceived support from family, friends, and partners (e.g., "My family really tries to help me"). The items describing sources of social support in the MSPSS were designed to allow respondents to interpret the items and adapt them to their own relationship situation (e.g., when selecting a "special person"). The response mode comprises a seven-point Likert scale (strongly disagree to strongly agree). Zimet et al. [56] reported excellent psychometric properties, especially considering the number of items on the scale. In terms of internal reliability, an alpha coefficient of 0.88

was reported for the total scale. In this study, the Cronbach's α value was 0.91, as in other previous studies.

2.3.4. Resilience

The Connor Davidson Resilience Scale (CD-RISC [57–59]) assesses resilience and the ability to cope with adversity. The CD-RISC is a self-administered questionnaire with ten items (e.g., "Able to adapt to change") designed as an additive Likert-type scale with five response options (0 = never; 4 = almost always) and had a single dimension in the original version. The final score of the questionnaire was the sum of the responses to the individual items (range 0–40), with the highest scores indicating the highest level of resilience. In this study, Cronbach's α value was 0.84, as in other previous studies.

2.4. Data Analysis

First, the means and standard deviations of the variables for the total sample and the subsamples are presented, along with the differences between the Italian and Spanish samples for the variables included in the survey using the Student's *t*-test. Finally, bivariate correlation analysis was performed between the variables of the study to proceed with a hierarchical multiple regression analysis to investigate the predictive power of resources on resilience. All analyses were conducted using SPSS 29.

3. Results

3.1. Objective 1: Descriptive Analysis and Statistically Significant Differences between Italy and Spain on Study Variables

Table 1 contains information on the descriptive statistics of the total sample and the Italian and Spanish sub-samples; to answer the first research question, the differences between the Italian and Spanish samples in relation to the variables studied are also presented.

Table 1. Descriptive statistics for the total sample $(n = 287)$, including the Italian $(n = 147)$ and Spanish	1
(n = 140) samples and t -score.	

	Sample	Min	Max	Mean	SD	Skewness	Kurtosis	t-Score	
Creative personality	Total	-6	13	2.58	3.25	0.46	0.52		
	IT	-3	13	3.65	2.91	0.73	1.30	6.04 **	
	ES	-6	11	1.46	3.21	0.62	0.33	6.04 **	
	Total	54	105	79.17	9.55	-0.04	-0.01		
	IT	54	105	83.01	8.81	-0.21	0.35	T (1 **	
	ES	55	101	75.14	8.62	0.05	0.31	7.64 **	
	Total	12	84	66.65	12.83	-0.94	1.42		
	IT	32	84	64.59	11.55	-0.30	-0.53	2 01 **	
support	r P 0-14	ES	12	84	68.81	13.77	-1.54	3.31	-2.81 **
	Total	15	55	38.44	7.21	-0.51	0.37		
Resilience	Resilience IT	15	55	38.04	6.93	-0.53	0.71	-0.96	
-	ES	16	55	38.87	7.50	-0.53	0.16	-0.90	

** p < 0.001. Note: Total = Total sample (n = 287); IT = Italian sample (n = 147); ES = Spanish sample (n = 140). All skewness smaller than 2 and all kurtosis smaller than 7 indicate a normal distribution, denoted by Kline [60].

There were statistically significant differences between the Italian and Spanish samples: in Creative personality attributes [t(285) = 6.04, p < 0.001)] and Divergent Thinking [t(285) = 7.64, p < 0.001)], the Italian samples scored higher than the Spanish samples, while social support [t(285) = -2.81, p < 0.05)] was higher in the Spanish samples. There were no statistically significant differences in resilience between the Italian and Spanish samples.

3.2. Objective 2: Correlations among Variables Preliminary to Hierarchical Regression Model

As a preliminary step to the regression to answer the second research question, Table 2 shows the linear correlations between the variables for the entire sample. As found in other studies [12,19,26,49], creativity, social support, and resilience are significantly correlated.

Table 2. Correlations among variables.

Variables	Sample	1.	2.	3.	4.
1. Creative personality	Total		0.279 **	0.068	0.133 *
2. Divergent thinking	Total			0.071	0.348 **
3. Social support	Total				0.292 **
4. Resilience	Total				

Note: * p < 0.05; ** p < 0.001; Total = Total sample.

Finally, a three-stage hierarchical multiple regression was conducted for the entire sample, with resilience as the dependent variable. In the first stage of the regression, nationality and gender were included to control for the impact of socio-demographic aspects. In the second stage, social support was included as a relationship variable. In the third stage, the measure of creative person (i.e., creative personality attributes) and creative process (i.e., divergent thinking) were entered to include individual variables. The regression statistics are shown in Table 3 for the total sample.

Table 3. Hierarchical regression models.

Total Sample							
	Independent Variable	β	t	R ² adj	ΔR^2	F _(gdl)	
Step 1	Gender	0.146 *	2.49	- 0.018	0.025	3.58 _(2,284)	
	Nationality	0.063	1.08	0.018			
Step 2	Gender	0.205 **	3.62			13.56 _(3,283)	
	Nationality	0.012	0.211	0.116	0.101		
	Social support	0.328 **	5.72	-			
Step3	Gender	0.181 **	3.44				
	Nationality	0.208 **	3.46	-			
	Social support	0.258 **	4.77	0.244	0.132	19.49 _(5,281)	
	Creative personality attributes	0.083	1.49	-			
	Divergent thinking	0.383 **	6.08	-			

Note: * p < 0.05; ** p < 0.001.

The assumptions for the regression [61] were tested as shown below. Tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern (gender, tolerance = 0.96, VIF = 1.04; nationality, tolerance = 0.75, VIF = 1.36; social support, tolerance = 0.90, VIF = 1.10; creative personality attributes, tolerance = 0.86, VIF = 1.16; divergent thinking, tolerance = 0.78, VIF = 1.27). The data met the assumption of independent errors (Durbin–Watson value = 2.01). The histogram of standardized residuals indicated that the data contained approximately normally distributed errors, as did the normal P-P plot of standardized residuals, which showed points that were not completely on the line but were close. The scatterplot of standardized residuals showed that the data met the assumptions of homogeneity of variance and linearity. The data also met the assumption of non-zero variances (social support, variance = 169.83; creative

personality attributes, variance = 10.59; divergent thinking, variance = 88.41; resilience, variance = 51.50).

The hierarchical multiple regression showed that in the first step only gender contributed to the regression model [F (2,284) = 3.58, p < 0.05]. In the second step, the additional variation in resilience was caused by gender and social support [F (3,283) =13.56, p < 0.001]. Finally, the addition of creative personality attributes and divergent thinking in the third step explained more of the variation in resilience in the model [F (5,281) = 19.49, p < 0.001). The most important predictor of resilience, controlling for gender and nationality, is social support and the creative process (i.e., divergent thinking), which explain about 20% of the variation in resilience in the third step of the model.

4. Discussion and Conclusions

The cross-national study examined this relationship using a sample of university students from Italy and Spain, countries in the Mediterranean region that are culturally similar and have experienced the pandemic period in a similar way. Finally, the study analyzed the predictive value of social support and creativity factors (personality attributes and divergent thinking) for resilience, taking into account gender and nationality.

In view of the results of the study, the mean values for the creative personality attributes both in the total sample and in the two subsamples of this study are significantly lower than the mean values determined by Gough in his validation study [52]. Compared to other recent studies (e.g., [62]), the Italian subsample achieves a higher mean value, while the Spanish subsample also remains below the mean value here. Other studies, such as that by Lüscher et al. [63], have already emphasized the differences in the mean values of the cross-national samples and attached considerable weight to the cultural background when defining one's own creative personality attributes. In contrast, the mean of divergent thinking in this study (total and subsamples) is much higher than in recent studies with a target population of Southern European university students, such as De Prada et al. [64], but remains higher than in studies with Asian populations, such as Wang et al. [65]. Compared to the mean score of the original study by Zimet [57], the Spanish subsample in this study achieved a higher mean score for social support, while the Italian subsample was slightly lower. In contrast, the mean scores of both subsamples in this study are higher than the mean score of social support analyzed in recent studies with university students, such as Saputra and Palupi [66]. This result may indicate a trend that has led to a decline in social support over the past decade and has been reversed by the pandemic events. The mean resilience of this study is significantly lower in the total sample and in the subsamples than in Italian and Spanish studies such as Di Fabio and Saklofske [67] and Notario-Pacheco et al. [60]. This difference in resilience scores found in similar samples could be due to the pandemic period, which is the context of this study.

In relation to our first objective, which was to investigate any differences between the Italian and Spanish samples in relation to the variables studied, there are differences in all variables except resilience. That Italy and Spain have faced the pandemic with a similar timetable and modalities is confirmed to us by the resilience, the extent of which does not differ between the two countries, both of which seem to be seeking a phase of recovery and new adaptations [46–49]. Italian respondents describe themselves as more creative than their Spanish peers, both in terms of personality attributes and divergent thinking. In turn, the Spanish group feels more socially supported than their Italian peers. For the Italian group, however, creativity seems to be the most important resource, especially as an individual resource, while in Spain, social support, a more relational aspect, plays a more important role. Data on these variables are not available in the post-pandemic literature, so it is not possible to compare these results. However, it is known that creative personality attributes and social support are variables that are particularly related to the culture of belonging [63]. In this case, we are dealing with European Mediterranean countries with a common cultural tradition [29]; therefore, no significant differences were expected. Contrary to the assumptions of Papadopoulos and Roumpakis [28], Italy and Spain differ

in the type of resources with which students are more familiar. These differences in terms of the resources most perceived by students in the two countries could represent valuable information for the education system and, in this case, for the higher education system in particular. If it is known in the literature that creative and relational resources promote resilience, it could be interesting to strengthen the resources perceived as less strong by the students themselves through study programs. The didactic offer of experiential workshops, for example, offers the opportunity not only to train one's own creative potential and divergent thinking but also to create new peer groups that can take the form of a new social network.

To address our second objective, the third model of hierarchical regressions, controlling for gender and nationality, shows that resilience is predicted by social support and divergent thinking but not by creative personality attributes. These results prompt us to think again about the factors related to resilient behavior in emerging adults, which, according to this study, are not only individual variables, as in the case of creative personality traits. In fact, an important relationship also emerges in aspects related to the creative thinking process, which is lateral and divergent, and there is less focus on cause—effect relationships, as is typical of logical—mathematical thinking. Finally, the quality of the social relationships that students perceive as supportive, i.e., the social-relational aspects, also plays a role.

As far as the authors are aware, there are no studies before or after a pandemic in which the predictive power of creativity and relationship factors for resilience have been examined together in the same population. Therefore, it is difficult to compare this data to draw broader conclusions about what this model tells us about growing adults in this historical period. However, the scientific literature provides us with some food for thought which we can use to try to interpret the results of the present study. In terms of creativity, several studies (e.g., [4,19,64,68]) demonstrate the interest of both countries in creativity and the desire to use this cross-cutting skill in different developmental contexts. Thus, although there are slight differences in the level of creativity in Italy and Spain, both countries promote education systems that are increasingly geared toward supporting the creative potential of the new generations. Undoubtedly, the contribution of the pandemic period has also influenced students' creativity levels: uncertainty, social isolation [7], and the increasing complexity of coping with distance learning have indeed improved creative skills while increasing the ability to think outside the box and find creative solutions. As far as social support is concerned, the literature mentions the great importance of social relationships as one of the culturally defining factors of European Mediterranean countries [28,29]. It is therefore not surprising that, especially after the long period of isolation caused by the pandemic, social support is a key factor for restart and resilience for young people in Italy and Spain. We can also hypothesize that the differences in the perception of social support by Italian and Spanish students are due to several factors, including age and distance from family of origin. The average age of the Italian students is slightly higher than that of the Spanish sample; therefore, the Italian students could already be living outside the household of their family of origin or at a different stage of separation from it. Moreover, in the Italian sample, a large percentage of students lived outside the home, i.e., alone or with roommates [50], because they came from other regions. This additional reason may have influenced the perception of social support, which was less pronounced in the Italian sample.

On the basis of these findings, it is important to point out a number of limitations inherent in this study, but which provide a good starting point for lines of research that will hopefully be explored further in the future. The cross-sectional nature of the study does not allow for longitudinal analyses to further investigate the directionality of these relationships with causal links. Thus, future studies can examine the trend of the relationship between creativity, social support, and resilience to better identify how it changes and how the developmental trajectories of young adults can be taken into account, especially in the years after the end of the pandemic. In addition, the sample size of this study does not lend itself to conducting more detailed analyses, such as in the case of structural equation

modeling (SEM). Future studies could expand the sample by including more university students from the Mediterranean region so that the results are generalizable. There is also the possibility of a more detailed analysis of cultural differences and possible lines of action that can be shared at the European level. It is desirable that the educational system, and in this case, the university, is committed to promoting creativity, including through educational and laboratory activities, which can be a reason for bringing together and forming new social and friendship networks. However, it is important to investigate what intervention programs are already underway and what results have been achieved in order to disseminate good practices at the European level.

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References

 Odriozola-González, P.; Planchuelo-Gómez, A.; Irurtia, M.J.; de Luis-García, R. Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Res.* 2020, 290, e113108. [CrossRef]

- 2. Elmer, T.; Mepham, K.; Stadtfeld, C. Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLoS ONE* **2020**, *15*, e0236337. [CrossRef]
- 3. Aristovnik, A.; Keržič, D.; Ravšelj, D.; Tomaževič, N.; Umek, L. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability* **2020**, *12*, 8438. [CrossRef]
- 4. De Lorenzo, A.; Lattke, L.S.; Rabaglietti, E. Changes in Weight, Body Image Perception and Self-Efficacy: A Study on Italian Adolescents during the Pandemic Period. *Eur. J. Humanit. Soc. Sci.* **2021**, *1*, 48–54. [CrossRef]
- 5. Saulle, R.; De Sario, M.; Bena, A.; Capra, P.; Culasso, M.; Davoli, M.; Minozzi, S. School closures and mental health, wellbeing and health behaviours among children and adolescents during the second COVID-19 wave: A systematic review of the literature. *Epidemiol. Prev.* **2022**, *46*, 333–352. [CrossRef]
- 6. Nitschke, J.P.; Forbes, P.A.G.; Ali, N.; Cutler, J.; Apps, M.A.J.; Lockwood, P.L.; Lamm, C. Resilience during uncertainty? Greater social connectedness during COVID-19 lockdown is associated with reduced distress and fatigue. *Br. J. Health Psychol.* **2021**, *26*, 553–569. [CrossRef]
- 7. Banerjee, D.; Rai, M. Social isolation in Covid-19: The impact of loneliness. Int. J. Soc. Psychiatry 2020, 66, 525–527. [CrossRef]
- 8. Ford, C.M.; Sharfman, M.P.; Dean, J.W. Factors associated with creative strategic decisions. *Creativity Innov. Manag.* **2008**, 17, 171–185. [CrossRef]
- 9. Verger, N.B.; Urbanowicz, A.; Shankland, R.; McAloney-Kocaman, K. Coping in isolation: Predictors of individual and household risks and resilience against the COVID-19 pandemic. *Soc. Sci. Humanit. Open* **2021**, *3*, 100123. [CrossRef]
- 10. Metzl, E.S.; Morrell, M.A. The role of creativity in models of resilience: Theoretical exploration and practical applications. *J. Creat. Ment. Health* **2008**, *3*, 303–318. [CrossRef]
- 11. Cohen, A.K.; Cromwell, J.R. How to respond to the COVID-19 pandemic with more creativity and innovation. *Popul. Health Manag.* **2021**, 24, 153–155. [CrossRef]
- 12. Özmete, E.; Pak, M. The relationship between anxiety levels and perceived social support during the pandemic of COVID-19 in Turkey. *Soc. Work Public Health* **2020**, 35, 603–616. [CrossRef]
- 13. Lardone, A.; Sorrentino, P.; Giancamilli, F.; Palombi, T.; Simper, T.; Mandolesi, L.; Lucidi, F.; Chirico, A.; Galli, F. Psychosocial variables and quality of life during the COVID-19 lockdown: A correlational study on a convenience sample of young Italians. *PeerJ* 2020, 8, e10611. [CrossRef]
- 14. Kaufman, J.C.; Sternberg, R.J. The Cambridge Handbook of Creativity; Cambridge University Press (CUP): Cambridge, UK, 2010.
- 15. Kapoor, H.; Kaufman, J.C. Meaning-making through creativity during COVID-19. Front. Psychol. 2020, 11, 595990. [CrossRef]

16. Tromp, C.; Sternberg, R.J. Dynamic creativity: A person × task × situation interaction framework. *J. Creative Behav.* **2022**, *56*, 553–565. [CrossRef]

- 17. Walia, C. A Dynamic definition of creativity. Creativity Res. J. 2019, 31, 237–247. [CrossRef]
- 18. Fauziah, M.; Marmoah, S.; Murwaningsih, T.; Saddhono, K. The effect of thinking actively in a social context and creative problem-solving learning models on divergent-thinking skills viewed from adversity quotient. *Eur. J. Educ. Res.* 2020, *9*, 537–568. [CrossRef]
- Fernández-Díaz, J.R.; Gutiérrez-Ortega, M.; Llamas-Salguero, F.; Cantón-Mayo, I. Creativity and resilience as predictors of career success. Sustainability 2021, 13, 4489. [CrossRef]
- 20. McFadden, S.H.; Basting, A.D. Healthy aging persons and their brains: Promoting resilience through creative engagement. *Clin. Geriatr. Med.* **2010**, *26*, 149–161. [CrossRef]
- 21. Lopez-Persem, A.; Bieth, T.; Guiet, S.; Ovando-Tellez, M.; Volle, E. Through thick and thin: Changes in creativity during the first lockdown of the COVID-19 Pandemic. *Front. Psychol.* **2022**, *13*, 821550. [CrossRef]
- 22. Karwowski, M.; Zielińska, A.; Jankowska, D.M.; Strutyńska, E.; Omelańczuk, I.; Lebuda, I. Creative Lockdown? A Daily Diary Study of Creative Activity During Pandemics. *Front. Psychol.* **2021**, *12*, 600076. [CrossRef]
- 23. Michinov, E.; Michinov, N. Stay at home! When personality profiles influence mental health and creativity during the COVID-19 lockdown. *Curr. Psychol.* **2021**, 42, 5650–5661. [CrossRef]
- 24. Ozbay, F.; Johnson, D.C.; Dimoulas, E.; Morgan, C.A., III; Charney, D.; Southwick, S. Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry* **2007**, *4*, 35. Available online: https://pubmed.ncbi.nlm.nih.gov/20806028/ (accessed on 22 January 2024).
- 25. Folk, D.; Okabe-Miyamoto, K.; Dunn, E.; Lyubomirsky, S. Did social connection decline during the first wave of COVID-19?: The role of extraversion. *Collabra Psychol.* **2020**, *6*, 37. [CrossRef]
- 26. Perry-Smith, J.E. Social yet creative: The role of social relationships in facilitating individual creativity. *Acad. Manag. J.* **2006**, 49, 85–101. [CrossRef]
- 27. Tan, C.-S.; Chin, X.-Y.; Chng, S.T.-C.; Lee, J.; Ooi, C.-S. Perceived social support increases creativity: Experimental evidence. *Int. J. Environ. Res. Public Health* **2022**, *19*, 11841. [CrossRef]
- 28. Papadopoulos, T.; Roumpakis, A. Southern europe. In *Handbook on Society and Social Policy*; Edward Elgar Publishing: Cheltenham, UK, 2020. [CrossRef]
- 29. Jurado-Guerrero, T.; Naldini, M. Child and family policy in Southern Europe. In *Handbook of Family Policy*; Edward Elgar Publishing: Cheltenham, UK, 2018. [CrossRef]
- 30. Martínez-Campillo, A.; Fernández-Santos, Y. The impact of the economic crisis on the (in)efficiency of public Higher Education institutions in Southern Europe: The case of Spanish universities. *Socio-Econ. Plan. Sci.* **2020**, *71*, 100771. [CrossRef]
- 31. Halliburton, A.E.; Hill, M.B.; Dawson, B.L.; Hightower, J.M.; Rueden, H. Increased Stress, Declining Mental Health: Emerging Adults' Experiences in College during COVID-19. *Emerg. Adulthood* **2021**, *9*, 433–448. [CrossRef]
- 32. Perry, B.L.; Smith, N.C.; Coleman, M.E.; Pescosolido, B.A. Social networks, the COVID-19 pandemic, and emerging adults' mental health: Resiliency through social bonding and cohesion. *Am. J. Public Health* **2024**, 114 (Suppl. 3), S258–S267. [CrossRef]
- 33. Preetz, R.; Filser, A.; Broemmelhaus, A.; Baalmann, T.; Feldhaus, M. Longitudinal changes in life satisfaction and mental health in emerging adulthood during the COVID-19 pandemic. risk and protective factors. *Emerg. Adulthood* **2021**, *9*, 602–617. [CrossRef]
- 34. Xu, Y.; Shao, J.; Zeng, W.; Wu, X.; Huang, D.; Zeng, Y.; Wu, J. Depression and creativity during COVID-19: Psychological resilience as a mediator and deliberate rumination as a moderator. *Front. Psychol.* **2021**, *12*, 665961. [CrossRef]
- 35. Arnett, J.J. Emerging adulthood: Understanding the new way of coming of age. In *Emerging Adults in America: Coming of Age in the 21st Century*; Arnett, J.J., Tanner, J.L., Eds.; American Psychological Association Press: Washington, DC, USA, 2005; pp. 3–20. [CrossRef]
- 36. Gambin, M.; Sękowski, M.; Woźniak-Prus, M.; Wnuk, A.; Oleksy, T.; Cudo, A.; Hansen, K.; Huflejt-Łukasik, M.; Kubicka, K.; Łyś, A.E.; et al. Generalized anxiety and depressive symptoms in various age groups during the COVID-19 lockdown in Poland. Specific predictors and differences in symptoms severity. *Compr. Psychiatry* **2020**, *105*, 152222. [CrossRef]
- Pierce, M.; Hope, H.; Ford, T.; Hatch, S.; Hotopf, M.; John, A.; Kontopantelis, E.; Webb, R.; Wessely, S.; McManus, S.; et al. Mental health before and during the COVID-19 pandemic: A longitudinal probability sample survey of the UK population. *Lancet Psychiatry* **2020**, *7*, 883–892. [CrossRef]
- 38. Kujawa, A.; Green, H.; Compas, B.E.; Dickey, L.; Pegg, S. Exposure to COVID-19 pandemic stress: Associations with depression and anxiety in emerging adults in the United States. *Depress. Anxiety* **2020**, *37*, 1280–1288. [CrossRef]
- 39. Prowse, R.; Sherratt, F.; Abizaid, A.; Gabrys, R.L.; Hellemans, K.G.C.; Patterson, Z.R.; McQuaid, R.J. Coping with the COVID-19 pandemic: Examining gender differences in stress and mental health among university students. *Front. Psychiatry* **2021**, *12*, 650759. [CrossRef]
- 40. Krifa, I.; van Zyl, L.E.; Braham, A.; Ben Nasr, S.; Shankland, R. Mental health during COVID-19 pandemic: The role of optimism and emotional regulation. *Int. J. Environ. Res. Public Health* **2022**, *19*, 1413. [CrossRef]
- 41. Evens, R.; Reiche, S.; Marek, R.M.; Moon, D.U.; Groß, R.E.; Romanello, A.; Masah, D.J.; Böckheler, M.S.; Gutwinski, S.; Montag, C.; et al. Psychedelic experiences during the early COVID-19 pandemic: Findings from an international online survey. *Front. Psychiatry* **2021**, *12*, 732028. [CrossRef]

42. Calandri, E.; Graziano, F.; Begotti, T.; Cattelino, E.; Gattino, S.; Rollero, C.; Fedi, A. Adjustment to COVID-19 lockdown among italian university students: The role of concerns, change in peer and family relationships and in learning skills, emotional, and academic self-efficacy on depressive symptoms. *Front. Psychol.* **2021**, *12*, 643088. [CrossRef]

- 43. Rogowska, A.M.; Ochnik, D.; Kusnierz, C.; Jakubiak, M.; Schuetz, A.; Held, M.J.; Arzensek, A.; Benatov, J.; Berger, R.; Korchagina, E.; et al. Satisfaction with life among university students from nine countries: Cross-national study during the first wave of COVID-19 pandemic. *BMC Public Health* **2021**, 21, 2262. [CrossRef]
- 44. Mana, A.; Super, S.; Sardu, C.; Canal, D.J.; Moran, N.; Sagy, S. Individual, social and national coping resources and their relationships with mental health and anxiety: A comparative study in Israel, Italy, Spain, and the Netherlands during the Coronavirus pandemic. *Glob. Health Promot.* **2021**, *28*, 17–26. [CrossRef]
- 45. Faggioni, M.P.; González-Melado, F.J.; Di Pietro, M.L. National health system cuts and triage decisions during the COVID-19 pandemic in Italy and Spain: Ethical implications. *J. Med. Ethics* **2021**, *47*, 300–307. [CrossRef]
- 46. Núñez-Gil, I.J.; Fernández-Pérez, C.; Estrada, V.; Becerra-Muñoz, V.M.; El-Battrawy, I.; Uribarri, A.; Fernández-Rozas, I.; Feltes, G.; Viana-Llamas, M.C.; Trabattoni, D.; et al. Mortality risk assessment in Spain and Italy, insights of the HOPE COVID-19 registry. *Intern. Emerg. Med.* 2021, 16, 957–966. [CrossRef]
- 47. Ruiz, M.C.; Devonport, T.J.; Chen-Wilson, C.H.J.; Nicholls, W.; Cagas, J.Y.; Fernandez-Montalvo, J.; Choi, Y.; Robazza, C. A cross-cultural exploratory study of health behaviors and wellbeing during COVID-19. *Front. Psychol.* **2021**, *11*, 608216. [CrossRef]
- 48. Sandín, B.; Valiente, R.M.; García-Escalera, J.; Chorot, P. Impacto psicológico de la pandemia de COVID-19: Efectos negativos y positivos en población española asociados al periodo de confinamiento nacional. *Rev. Psicopatología Psicol. Clínica* 2020, 25, 1–22. [CrossRef]
- 49. Setyawati, S.M.; Nurfaizal, Y.; Dwiatmadja, C.; Anggraeni, A.I. Ade creative self-efficacy: A new approach to social support and creativity of smes' owners. *Int. J. Econ. Bus. Adm.* **2019**, *7*, 64–75. [CrossRef]
- 50. Dal Bianco, A.; Ricciari, V.; Spairani, A. La Mobilità Degli Studenti in Italia: Un'analisi Empirica. La Mobilità Degli Studenti in Italia. 2010, pp. 1000–1021. Available online: https://www.torrossa.com/en/resources/an/2410578 (accessed on 22 January 2024).
- 51. Williams, J.R. Revising the declaration of helsinki. World Med. J. 2008, 54, 120–125. [CrossRef]
- 52. Oldham, G.R.; Cummings, A. Employee creativity: Personal and contextual factors at work. *Acad. Manag. J.* **1996**, *39*, 607–634. [CrossRef]
- 53. Gough, H.G. A creative personality scale for the Adjective Check List. J. Pers. Soc. Psychol. 1979, 37, 1398–1405. [CrossRef]
- 54. López-Fernández, V.; Merino-Soto, C.; Fruto, M.L.M.; Garavito, C.A.O. Analysis of the descriptive and psychometric characteristics of the internal structure of the ribs in spanish. *Creativity Res. J.* **2019**, *31*, 229–235. [CrossRef]
- 55. Runco, M.A.; Plucker, J.A.; Lim, W. Development and psychometric integrity of a measure of ideational behavior. *Creativity Res. J.* **2001**, *13*, 393–400. [CrossRef]
- 56. Zimet, G.D.; Dahlem, N.W.; Zimet, S.G.; Farley, G.K. The multidimensional scale of perceived social support. *J. Persinal. Assess.* **1988**, 52, 30–41. [CrossRef]
- 57. Connor, K.M.; Davidson, J.R.T. Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depress. Anxiety* **2003**, *18*, 76–82. [CrossRef]
- 58. Di Fabio, A.; Palazzeschi, L. Connor-Davidson Resilience Scale: Proprietà psicometriche della versione italiana [Connor-Davidson Resilience Scale: Psychometric properties of the Italian version]. *G. Ital. Ric. Appl.* **2012**, *5*, 101–110. Available online: https://flore.unifi.it/handle/2158/628717 (accessed on 22 January 2024).
- 59. Notario-Pacheco, B.; Solera-Martínez, M.; Serrano-Parra, M.D.; Bartolomé-Gutiérrez, R.; García-Campayo, J.; Martínez-Vizcaíno, V. Reliability and validity of the Spanish version of the 10-item Connor-Davidson Resilience Scale (10-item CD-RISC) in young adults. *Health Qual. Life Outcomes* **2011**, *9*, 63. [CrossRef]
- 60. Kline, R. Exploratory and confirmatory factor analysis. In *Applied Quantitative Analysis in Education and the Social Sciences*; Routledge: London, UK, 2013; pp. 171–207.
- 61. Hickey, G.L.; Kontopantelis, E.; Takkenberg, J.J.M.; Beyersdorf, F. Statistical primer: Checking model assumptions with regression diagnostics. *Interact. Cardiovasc. Thorac. Surg.* **2019**, *28*, 1–8. [CrossRef]
- 62. Park, S.H. A study on item-analysis of gough's a creative personality scale for the adjective check list. *Adv. Sci. Technol. Lett.* **2013**, 36, 54–57.
- 63. Luescher, R.; Barthelmess, P.Y.; Kim, S.; Richter, U.H.; Mittag, M. Conceptualizing creativity: General and cultural biases in gough's creative personality scale. *J. Creative Behav.* **2019**, *53*, 30–43. [CrossRef]
- 64. De Prada, E.; Mareque, M.; Pino-Juste, M. Creativity and intercultural experiences: The impact of university international exchanges. *Creat. Theor.-Res.-Appl.* **2020**, *7*, 321–345. [CrossRef]
- 65. Wang, Q.; Zhao, X.; Yuan, Y.; Shi, B. The relationship between creativity and intrusive rumination among chinese teenagers during the COVID-19 pandemic: Emotional resilience as a moderator. *Front. Psychol.* **2021**, *11*, 601104. [CrossRef]
- 66. Saputra, M.R.; Palupi, L.S. Relationship between social support and psychological well-being of the final year students. In *E3S Web of Conferences*; EDP Sciences: Les Ulis, France, 2020; Volume 202, p. 12027. [CrossRef]

67. Di Fabio, A.; Saklofske, D.H. Comparing ability and self-report trait emotional intelligence, fluid intelligence, and personality traits in career decision. *Pers. Individ. Differ.* **2014**, *64*, 174–178. [CrossRef]

68. Sica, L.S.; Ragozini, G.; Di Palma, T.; Sestito, L.A. Creativity as identity skill? late adolescents' management of identity, complexity and risk-taking. *J. Creative Behav.* **2019**, *53*, 457–471. [CrossRef]

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