

Subjective Well-Being of NEETs and Employability: A Study of Non-Urban Youths in Spain, Italy, and Portugal

Paolo Mazzocchi¹ , Omeed Agahi² , Mai Beilmann³, Leonor Bettencourt⁴ ,
Rūta Brazienė⁵ , Natalia Edisherashvili⁶ , Dilyana Keranova⁷ , Elena Marta⁸ ,
Valentina Milenkova⁷ , Niall O'Higgins⁹ , Federica Pizzolante¹ ,
Òscar Prieto-Flores² , Antonella Rocca¹ , Ricardo Borges Rodrigues⁴ ,
Miriam Rosa⁴ , Francisco Simões⁴ , and Borislav Yurukov⁷ 

¹ Department of Management and Quantitative Studies, University of Naples Parthenope, Italy

² School of Education and Psychology, University of Girona, Spain

³ Institute of Social Studies, University of Tartu, Estonia

⁴ Instituto Universitário de Lisboa (ISCTE), CIS-Iscte, Lisboa, Portugal

⁵ Faculty of Philosophy, Vilnius University, Lithuania

⁶ Institute of Education, University of Tartu, Estonia

⁷ South-West University "Neofit Rilski," Bulgaria

⁸ Research Centre on Community Development and Organisational Quality of Life (CERISVICO), Università Cattolica del Sacro Cuore, Italy

⁹ International Labour Organization, Switzerland

Correspondence: Paolo Mazzocchi (paolo.mazzocchi@uniparthenope.it)

Submitted: 18 July 2023 **Accepted:** 27 September 2023 **Published:** 31 January 2024

Issue: This article is part of the issue "Active Labour Market Policies and Youth Employment in European Peripheries" edited by Francisco Simões (ISCTE—University Institute of Lisbon) and Jale Tosun (Heidelberg University), fully open access at <https://doi.org/10.17645/pag.i378>

Abstract

Subjective well-being is of paramount importance when support is offered to young individuals seeking employment and social inclusion in general. The present study looks at different dimensions of youth well-being and the growing demands for skills to enable labour market integration. Based on survey data, this article examines the relationships between the role of public employment services in providing support and their impact on the subjective well-being of youth. Specifically, 1,275 not in education, employment, or training (NEET) rural youths from Italy, Portugal, and Spain participated in the survey. Drawing upon Bronfenbrenner's bioecological model, the current study sets up a model which includes different factors at the micro-, meso-, exo-, and macro-system levels. The results show that non-urban NEETs' subjective well-being is associated positively with public employment services availability, while the relationship with public employment services interaction and public employment services support is non-significant. A positive and significant relationship emerged also with self-efficacy and social support. Some recommendations for policymakers are discussed.

Keywords

European Union; Italy; NEETs; non-urban youths; Portugal; public employment services; Spain; well-being

1. Introduction

Life satisfaction, which refers to the cognitive component of subjective well-being (Diener et al., 1999; Pavot et al., 1991) is associated with various aspects of young people's lives, such as their educational and employment situation (Easterlin, 2006; Jongbloed & Giret, 2022; Schulenberg et al., 2004). Specifically, higher life satisfaction predicts a stronger belief in the role of education for one's future, leading to greater engagement in an educational path (Lewis et al., 2011) and, in turn, is predicted by employment stability and job security (Khattab & Fenton, 2009). However, the relationship between job uncertainty, unemployment, and life satisfaction is influenced by one's sense of control over life and social relationships. This is particularly relevant for young people who are neither in employment nor in education or training (NEET; de Almeida & Simões, 2020; Mawn et al., 2017), as they are more likely to experience poverty and social exclusion (Eurostat, 2018b).

The present article explores how different individual and social environment factors contribute to the life satisfaction of NEETs and the relationship between their subjective well-being and the support provided by public employment services (PES) to facilitate NEETs' access to the labour market. The current empirical analysis specifically addresses "rural" (or non-urban) NEETs, as this constitutes a neglected sub-group of both rural youths and NEETs overall (Eurostat, 2020).

Several studies (see, among others, Mascherini, 2019) have stressed the need to consider the NEETs' area of residence when addressing the groups' heterogeneity. According to the Eurostat (2020) definition, the NEETs' cluster can be partitioned into three categories taking into account population density: NEETs living in rural areas, suburbs, or cities. Eurostat data shows that these different NEET clusters present very different characteristics. In fact, it is well established that living in rural areas often implies some disadvantages, such as more difficult access to services, public transport, limited recruitment opportunities, and a lack of choice and information (Sadler et al., 2015). Young people living in rural areas see educational opportunities and recreational facilities as insufficient and feel they have fewer opportunities to go to university (Simões et al., 2023). Among others, Carling and Schewel (2017) contend that rural NEETs are more affected by involuntary immobility, as they might want to leave rural areas but lack the resources to do so. For these reasons, the condition of NEETs residing in rural (non-urban) areas is associated with multiple aspects of vulnerability, often overlooked in the literature. In this situation of fragility, the presence of support at different levels constitutes a protective factor and impacts the quality of life. Accordingly, given that young people from non-urban areas face increased vulnerability (Simões et al., 2017), and since policy measures do not seem to be able to overcome the mismatch between the agricultural sector's human needs and rural NEETs' employment needs, this study also attempts to analyse the specific features connected to their employability and the support they receive from PES. In general, PES connects job seekers with employers and disseminates various active labour market policies. Smoter (2022) offered an overview of the PES practices aimed at rural NEETs in Poland and highlighted several difficulties in reaching a significant share of these young NEETs. The current article draws upon Bronfenbrenner's (1979) bioecological model (see also Bronfenbrenner & Morris, 2006), which emphasises the role of contextual factors in mediating an

individual's developmental trajectory. Bronfenbrenner defined well-being as a positive state that is acquired through the simultaneous and equal satisfaction of material and psychological needs which are placed at five levels: individual (i.e., organic-hereditary factors, skills, and lifestyle), micro (i.e., closest life contexts and people with whom a person has direct contact), meso (i.e., the combination of several interconnected microsystems), eso (i.e., contexts that influence people's lives, although they are not directly in contact with them), and, finally, macro (i.e., the cultural, value, legislative, and media system). Specifically, the literature argues that NEETs' self-assessment and perceptions of their life satisfaction (Diener et al., 1999) need to be understood by considering different factors at the micro-, meso-, exo-, and macro-system levels, encompassing individual experiences and socio-structural contexts. Accordingly, this study aims to gain a better understanding of NEETs' life satisfaction by examining the specific contributions of individual and microlevel factors, such as *self-efficacy* and *social support*, as well as contextual and social factors, such as *perceived interaction with PES*, *perceived PES availability*, and *perceived PES support*.

The present study focuses on Southern welfare states (Ferrera, 1996), in particular Spain, Italy, and Portugal, which share characteristics and can form a cluster for analysis in the literature on welfare states and social policy. Although there may be differences in specific social policies (León & Pavolini, 2014), Southern European countries share the challenge of reducing youth unemployment and NEET youth rates. Moreover, these countries configure what has been characterised as the "Mediterranean model" of transition to adulthood. This is characterised by young people staying longer with their family and the presence of a "strong" family, which values parental networks and the care of all its members in challenging situations (e.g., the elderly when ill but also young people without employment; Barbagli et al., 2003; Reher, 1998).

2. NEET Status and Youth Life Satisfaction: A Bioecological Model Framework

NEETs specifically refer to young people aged between 15 and 34 years who are excluded from employment, education, or training (Ose & Jensen, 2017). As a highly heterogeneous group, this category needs to be disaggregated to provide suitable policy responses for all young people (Mascherini, 2018). To date, research has not provided a comprehensive, transnational framework to understand the profile, trajectories, and (in)formal support systems of these youths in rural areas (White, 2012). Over the past few years, the literature on NEET youths has increased. However, studies and evidence are still lacking regarding the specific situations NEET youths face in rural areas (Simões et al., 2023) and more specifically on the impact that PES have in these areas.

Research suggests that the life satisfaction of NEET youth may depend on the perceived support (formal or informal) in their employability (Smoter, 2022). Life satisfaction, defined as an individual's cognitive evaluation of the overall quality of life (Diener et al., 1999; Pavot et al., 1991; Proctor et al., 2017), is a central indicator of positive functioning among young people (Suldo et al., 2006) and a component of subjective well-being. Prior reports have shown that poorer well-being in general is linked with youth unemployment (De Witte, 1993; Reneflot & Evensen, 2014) and with lower life satisfaction in particular (Layard, 2005). This is even more evident for vulnerable unemployed young people, such as NEETs (Ellena et al., 2021; Jongbloed & Giret, 2022). Such findings call for a more comprehensive view of NEETs' outcomes. Policymakers seem to recognise life satisfaction as a crucial individual outcome across all stages of the life cycle, including early adulthood (Knies, 2011). However, this seems to be less the case with the school-to-work transition. This gap requires a wider research perspective usually labelled as the "beyond the

GDP” approach, combining the usual trade-offs of economic growth measured in terms of young people’s employment or employability with skills and capabilities development, as well as with well-being dimensions such as life satisfaction (United Nations, 2021).

Life satisfaction is a multidetermined outcome. Indeed, life satisfaction is influenced by factors such as age, family situation, social relationships and friendship networks (Kasprzak, 2011), educational level (Ben-Shlomo et al., 2022), employment situation (Khattab & Fenton, 2009), and the ability to navigate the challenges of early adulthood (Melin, 2003). This means that life satisfaction outcomes are shaped by factors situated at multiple levels of social reality. Adopting a multilevel or systemic perspective seems, therefore, a more appropriate conceptual approach to capture the nuances and driving forces behind NEETs’ life satisfaction.

The bioecological model may provide a relevant grid to understand in-depth life satisfaction determinants. The central assumption of this theoretical framework is that personal development results from permanent interactions between protective and risk factors occurring at five interdependent ecological levels concurring with an individual’s positive development and well-being (Bronfenbrenner & Morris, 2006).

The *individual level* comprises the person’s demographic and temperamental characteristics, including their activities, social roles, and skills, which altogether create a personal model of meaning attribution. To fill in this layer of the bioecological model, we considered self-efficacy in our model. Self-efficacy is defined as the personal belief that one can be successful by generating the desired outcomes for a determined task (Bandura et al., 2001). Self-efficacy is an important psychological correlate of overall and vulnerable young adults’ school-to-work transition trajectories. Indeed, vulnerable young adults’ access to the labour market, as in the case of NEETs, is affected by lower educational qualifications and recurrent and longer unemployment spells, leading altogether to lower perceived self-efficacy (Mortimer et al., 2016). In the long run, more negative self-efficacy beliefs can be detrimental to employment prospects, hampering their expectations towards finding more qualified and better-paid jobs (de Almeida & Simões, 2020) while increasing stress levels associated with professional development (Vansteenkiste et al., 2004). Importantly, positive self-efficacy improves life satisfaction perceptions among adolescents (Marcionietti & Rossier, 2021) and young adults (Zeng et al., 2022), indirectly improving other employability measures, such as career adaptability (Marcionietti & Rossier, 2021).

The *microsystem level* covers the subjective experiences stemming from specific relationships with family, friends, work peers, or teachers and the connections between these different sources of support. One good measure of the quality of these experiences is social support, understood as social resources and perceived as being available or provided to a person by formal and informal relationships (Gottlieb & Bergen, 2010). Social support is important in the transition to labour, particularly in the case of young people in greater need. To overcome the challenges of entering the labour market, young NEETs tend to rely more on informal social support from family and friends (te Riele, 2010). Under these circumstances, social support seems to play a key role in compensating for the low quality of institutional support (de Almeida & Simões, 2020; Simões et al., 2017). Importantly, this trend highlights how NEETs’ feelings of lack of competence are influenced by broader socio-structural macro-contexts (Lőrinc et al., 2019), emphasising the impact that exosystemic forces can have on their opportunities, choices and well-being (Bynner & Parsons, 2002). Research also indicates a positive association between social relationships and friendship networks and the life satisfaction of young adults (e.g., Khattab & Fenton, 2009)

The *mesosystem level* refers to the multiple organisational contexts, such as the workplace, school, clubs or associations, or specific services, while the *exosystem level* corresponds to tangible resources (e.g., infrastructures, common spaces, or services) and wide informal networks and their places, such as neighbourhoods. PES support overlaps features of both the mesosystem and the exosystem level. PES are specific public services in the community, but they also unlock access to tangible resources, such as additional services (e.g., training), with their role, therefore, being comprehensive. PES are pivotal in tackling labour market inequalities (Broschinski & Assmann, 2020; Phan-Thuy et al., 2001), especially among the most disadvantaged labour market groups. However, the effect of PES support on multiple dimensions of young people in a situation of vulnerability remains uncovered beyond the GDP perspective. We do know that young people's perceptions based on their interaction and experiences with these services tend to be negative (Shore & Tosun, 2019), which in turn are associated with non-compliance, early withdrawal, or non-take-up (Van Parys & Struyven, 2013). All this can undermine young people's (re)entry into the labour market (Van Parys & Struyven, 2013), which in the long run is detrimental to young people's well-being.

Finally, the *macrosystem* refers to cultural and institutional dispositions, including a pattern of ideologies, beliefs, values, or governance forms that, to different degrees, are settled at the regional, national and international levels (Schoon & Heckhausen, 2019). This level of the bioecological model is addressed here by focusing on a selection of Southern European countries: Portugal, Spain, and Italy. These countries share among them a series of cultural and institutional features, as described by Walther (2006). From the institutional standpoint, the support for labour market integration in these countries is similar, meaning that young people are expected to fulfil some sort of status regarding work, education, or training. The employment sector is closed, with high levels of informality and active labour market policies that display low efficiency (Bello & Cuzzocrea, 2018). Education is non-selective, but training struggles with coverage problems despite notable improvements over the past decade (Garcia et al., 2023). From the cultural point of view, the limited institutional support is compensated by the culturally significant roles of informal networks and families, which is symptomatic of an unclear vision of young people's status in society and the role of the state in that regard (Walther, 2006)

3. Methodology

According to Lee et al. (2005), quality of life can be considered a multi-dimensional concept encompassing a number of constructs that can be treated as latent variables using questionnaires containing items as observed (or manifest) variables. Structural equation modelling (SEM) is suitable to explain multiple statistical relationships in models involving latent constructs. Specifically, the SEM-PLS (partial least squares) has been widely used across social science disciplines (see, among others, Akter et al., 2013; Benghasheer & Saub, 2020; Duong et al., 2022; Lee et al., 2005; Thien, 2020), in studies using different methodologies (Dash & Paul, 2021; Hair et al., 2019). Accordingly, we have adopted the SEM-PLS to investigate life satisfaction and associated variables. This methodology involves several latent constructs representing different dimensions of the phenomenon to be measured (Lauro et al., 2018; Tenenhaus et al., 2005).

The data used in this article were collected through the research survey Public Employment Services Tracking Effectiveness in Supporting Rural NEETS, carried out from November 2022 to January 2023 via a computer-assisted web interviewing technique. Various challenges were encountered in accessing the target group. The participants were mainly selected using the information available at PES from Bulgaria, Estonia,

Italy, Lithuania, Portugal, and Spain. Participants in the survey received a mobile phone link to the online questionnaire (managed by the Qualtrics platform) via a short message. The survey included 4,277 respondents from the above-mentioned six countries, of which 2,258 were retained as they met the inclusion criteria, namely being NEET as defined by the Eurostat (25 to 29 years old) and living in rural areas and towns with an urbanisation level 2 or 3 (classification DEGURBA; Eurostat, 2018a).

The large share of NEETs in Spain and the better organisation of the PES structure in the country possibly explain the large predominance of Spanish respondents in the survey (1,739). Participants from Italy and Portugal were also included (141 and 281 respondents, respectively). However, in Bulgaria, Estonia, and Lithuania, there were less than 100 eligible participants per country (25, 20, and 52 respondents in that order), being therefore excluded from subsequent analyses. This decision aimed to mitigate the wide amplitude in the number of participants from each country, while at the same time grouping a selection of Southern European countries which are rather homogeneous due to a series of cultural and institutional features identified in the introduction.

The 2,161 respondents from the above-mentioned three countries presented many missing observations, and the number of fully observed respondents that were retained in the final sample was 1,275 (see Table 1).

Table 1. Respondents by age and gender (absolute and relative frequencies).

Age	Gender			Total
	Female	Male	Other	
25	144 (59.02%)	98 (40.16%)	2 (0.82%)	244 (19.14%)
26	150 (64.66%)	80 (34.48%)	2 (0.86%)	232 (18.20%)
27	25 (56.82%)	19 (43.18%)	—	44 (3.45%)
28	165 (61.34%)	101 (37.55%)	3 (1.12%)	269 (21.1%)
29	290 (59.67%)	193 (39.71%)	3 (0.62%)	486 (38.12%)
Total	774 (60.71%)	491 (38.51%)	10 (0.78%)	1,275

The treatment of missing data represents a widely debated theme in the scientific literature (Enders, 2022). Concerning the SEM-PLS, Newman (2014) highlighted that this technique's main source of bias is, precisely, missing data. This problem is often handled through deletion methods, which reduce the sample size available for the analysis. This latter approach decreases variation in the data while missing data might be associated with groups of respondents who share some characteristics that might significantly influence the strength of relationships among variables. In contrast, missing data imputation methods replace data elements through various algorithms, leading to no reduction in sample size. Several procedures to handle missing data are available. In general, Hair et al. (2021) underlined that in case of less than 5% values missing for each indicator, missing value techniques (such as mean replacement, expectation-maximisation algorithm, and nearest neighbour) could be used. As stated above, incomplete observations with missing entries have been excluded from the statistical analysis, since they exceed the above-mentioned threshold.

Prevalent literature suggests two main approaches to estimating the SEM parameters. The SEM-PLS has been proposed as a component-based estimation procedure different from the classical covariance-based LISREL-type approach. The SEM-PLS maximises the explained variance of the endogenous latent variable(s) and refers to a system of matrix equations based on a specific path diagram describing the relationships

among the dimensions (Cataldo et al., 2021; Quintano & Mazzocchi, 2020; Quintano et al., 2020). The procedure can be described as a system of ordinary least squares regressions that can be performed to calculate the measurement and structural models (Hair et al., 2021). The path diagram shown in Figure 1 visually represents the relationships for a set of factors concerning life satisfaction. A brief description of the constructs is presented next. The model considers one endogenous variable, life satisfaction, to be estimated based on five latent, exogenous, determinants. The following determinants of life satisfaction were included:

- Self-efficacy: A set of attitudes helpful in solving complex problems and/or achieving specific goals, managing unexpected events, etc.
- PES interaction: Perceived level of services provided by PES and of employees' competencies.
- PES availability: Perceived level of availability shown by PES employees to provide support, recognise NEETs' skills, understand the problems, etc.
- PES support: Approaches of PES employees to obtain information on employment programmes, job opportunities, and future plans and applications.
- Social support: Features connected to satisfaction with friends, time spent with family and relatives, etc.

Each latent block includes a different number of manifest variables (items), as presented in Figure 1. Throughout the suggested model, the authors intend to verify whether there is a relationship between life satisfaction and its indicators. The list of variables included in each block of indicators is reported in Table A1 of the Supplementary File.

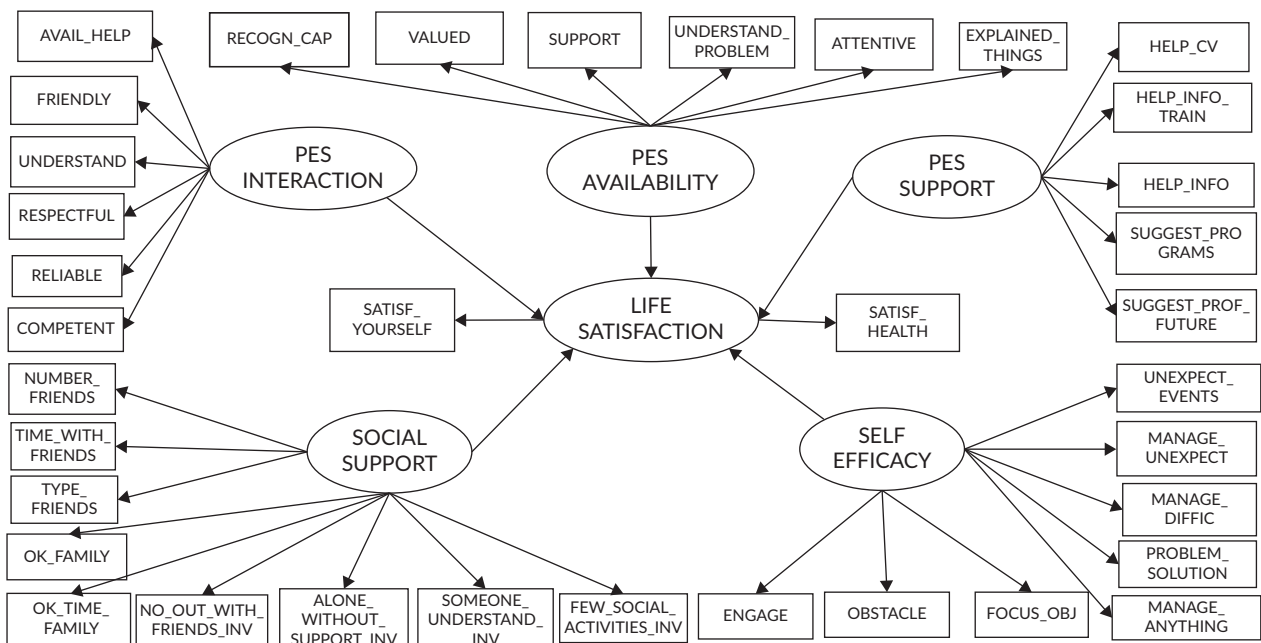


Figure 1. Path diagram.

4. Data Analysis

The respondents rated their level of agreement on different indicators related to the well-being aspects that could impact the life satisfaction of young NEETs. The question statements are answered on a five-point Likert-type scale. Depending on the question, the following options were given to the respondents: 1 = *completely disagree*, 5 = *completely agree*. Statistical SEM-PLS approach was applied to the study. In particular, this causal model was used to establish and evaluate the dependency relationship between the variables and to analyse how different dimensions of support were related to NEETs' life satisfaction.

In general, in SEM-PLS, the indicators must have the same direction compared to the other indicators of the measurement model (Ringle & Sarstedt, 2016). Accordingly, it is important to underline that, in the current analysis, some items required a transformation of their original scale. An example refers to items which measure “lack of support” rather than “support” (and vice versa), for instance, `no_out_with_friends` (social support). Therefore, these indicators have been inverted, changing their sign and their original name (plus “_INV”). In addition to `no_out_with_friends`, `alone_without_support`, `someone_understand`, and `few_social_activities` also needed their scale inverted. See, among others, Mehmetoglu and Venturini (2021) for an extensive discussion on rescale procedures.

Each socialisation concept emphasises a certain influencing factor. Thus, according to some views, personality formation is the result of interaction with the environment. Social exclusion and loss of belonging lead to identity crises, personality changes, and feelings of rejection and isolation, which create conditions for the individual to internalise an idea of themselves as an inferior subject. Interactions with significant others who are available in case of need help form a sense of basic security. Social support can have various dimensions of social relationships with significant others (family, friends, and teachers).

Compared to the entire set of indicators available in the questionnaire that defines the whole model, several indicators—and latent constructs—were removed since they presented no significant loadings or showed low consistency with the model focussed on in the current work. For instance, the education indicator—which is a significant aspect of personal development (as well as a major field for the gaining of knowledge and skills, as well as for the socialisation process)—presented no significant loadings and was thus removed from the model. In fact, SEM-PLS literature suggests considering the cross-loadings to evaluate if the connected latent variables significantly explain the different blocks, and some of them, such as education, did not reach a sufficiently significant value to be kept. Different latent constructs, such as obstacles (main difficulties that prevent people from getting a job), employment skills (abilities that can help people to find a good job), digital skills (the overall experience of using the Internet and the contribution of this experience to getting a job opportunity), frustration and lack of trust (indicators of feeling inadequate and not very confident in society), together with individual aspects (characteristics of the place where people live, leisure, relatives, etc.) have been removed (even if potentially analysable for specific insights) to ensure consistency in the model and focus on the most relevant aspects of the current analysis.

A PLS path model diagnosis begins with assessing the unidimensionality of reflective blocks of the measurement model (Hair et al., 2019). In PLS-PM (path modelling), there are three main indices to check unidimensionality: (a) Cronbach's alpha, (b) Dillon-Goldstein's rho, and (c) the first eigenvalue. Table 2 presents the corresponding results. These measures confirm that the model assumptions seem to be

appropriate and that the outer model is well specified (Quintano & Mazzocchi, 2020; Tenenhaus et al., 2005).

Table 2. Block unidimensionality for the model latent variables.

Latent variable	Dimensions	Cronbach's alpha	Dillon-Goldstein's rho	First eigenvalue	Second eigenvalue
Self-efficacy	8	0.890	0.913	4.555	0.797
Pes interaction	6	0.936	0.949	4.549	0.462
Pes availability	6	0.941	0.953	4.638	0.445
Pes support	5	0.924	0.943	3.839	0.457
Social support	9	0.806	0.854	3.613	1.525
Life satisfaction	2	0.632	0.844	1.462	0.538

Table 3 reports the main indices indicating the overall model quality: the R^2 coefficient and the communality and redundancy indices. The R^2 coefficient shows that the explanatory latent variables (LVs) correctly predict the endogenous LV and the values of the communality and redundancy indices are appreciably higher for all blocks. In Table 3, the goodness of fit index is also reported, showing an absolute value of 0.501 and a relative value of 0.386, which reflect a medium quality of the constructs.

Table 3. Overall model quality.

Latent variable	Type	R^2	Communalities (Average Variance Extracted)	Redundancies	Dillon-Goldstein's rho	Absolute goodness of fit index	Relative goodness of fit index
Self-efficacy	Exogenous		0.569		0.913		
Pes interaction	Exogenous		0.757		0.949		
Pes availability	Exogenous		0.772		0.953		
Pes support	Exogenous		0.766		0.942		
Social support	Exogenous		0.398		0.913		
Life satisfaction	Endogenous	0.401	0.728	0.246	0.843	0.501	0.386

The outer estimations shown in the Supplementary File (Table A2) include the cross-loadings, which are all positive and statistically significant. As for the inner estimation, Table 4 shows the path coefficients, which take on positive and negative values. Only three coefficients are statistically significant, having positive bootstrap confidential intervals: self-efficacy, PES availability, and social support.

Finally, we can summarise the results based on the path diagram model, identifying several variables significantly correlated with life satisfaction. When the standard SEM-PLS approach is performed, analysing the path coefficients, it appears that life satisfaction depends on its latent variables expressing the equation in the following form:

$$\text{Life satisfaction} = +2.254 \text{ SELF} - 0.055 \text{ PSIN} + 0.106 \text{ PSAV} + 0.007 \text{ PSSU} + 0.439 \text{ SCSU}$$

Table 4. Inner estimation of path coefficient and standard error for the model latent variables.

Latent variable	Path coefficient	Standard error
Self-efficacy (SELF)	0.254*	0.024
PES interaction (PSIN)	-0.055	0.038
PES availability (PSAV)	0.106*	0.042
PES support (PSSU)	0.007	0.031
Social support (SCSU)	0.439*	0.024

Note: * The coefficient is significant at the 0.05 level.

5. Discussion and Conclusions

This study's aim was to investigate how different individual and social environment factors contribute to the life satisfaction of the NEET youth and their enrolment in PES for labour market integration. Our primary aim was to find out to what extent NEET youths' family, PES, and wider community interaction patterns can be reflected in their labour market integration, and how different support measures might be associated with young people's subjective well-being.

Drawing upon Bronfenbrenner's (1979) bioecological model (see also Bronfenbrenner & Morris, 2006), we set up a model attempting to cover different factors at the micro-, meso-, exo-, and macro-system levels. We examined the specific contributions of individual factors, such as self-efficacy and microsystem level factors, such as social support, as well as contextual and social factors (meso- and eso-systems): perceived interaction with PES, perceived PES availability, and perceived PES support.

Looking at the path coefficients, it appears that life satisfaction significantly depends on latent variables: self-efficacy, PES availability, and social support. These latent constructs have positive and statistically significant loadings. We observed the most substantial relationship between life satisfaction and social support, which refers to satisfaction with the different domains in one's life (e.g., interaction with friends, time spent with family, etc.). Therefore, higher satisfaction with the different aspects of one's life leads to an expected outcome of higher overall life satisfaction. This significant relationship supports previous research article results, which argued that social relationships and friendship networks influence life satisfaction (Kasprzak, 2011). Higher self-efficacy, which implies a set of attitudes that help NEETs with solving complex problems, achieving specific goals, and managing unexpected events, also leads to higher life satisfaction.

It is also interesting that while there is a positive relationship between life satisfaction and PES availability (referring to the perceived level of availability shown by PES employees to give support, recognise NEET youth abilities, and understand their problems), there is no statistically significant relationship with PES interaction (referring to the perceived level of services provided by PES and employees' competences) and PES support (referring to PES employees' attempts to get information on employment programs, job opportunities, and future plans). In fact, two coefficients—PES interaction and PES support—do not offer clear evidence of their impact on life satisfaction. Therefore, it seems that the perceived supportiveness of the PES employees is the most critical component of PES services contributing to young people's life satisfaction. In conclusion, overall, our model provides broad support to our assumption that multiple factors across different levels of the social

environment affect NEETs' life satisfaction and their enrolment in PES for labour market integration. However, certain limitations apply to our study and there are further areas to research.

As for the limitations, first of all, it is important to bear in mind that due to the difficulty in accessing the target group, we had to employ non-probability sampling techniques, which left us with limited opportunities to expand our findings to the broader group of NEETs. Furthermore, the sample sizes in participating countries varied greatly, making it even more hazardous to draw broad conclusions. Second, due to very small sample sizes in some participating countries, we could not perform any country comparisons, despite the realisation that the socio-economic circumstances of both NEETs and PES are likely to vary a lot in different countries. However, the study has value as one of the first attempts to map what individual and social factors are related to non-urban life satisfaction and well-being, and how this is connected to the labour market integration of NEETs enrolled in PES. This study refers to the full set of data, by assuming a relative homogeneity that might result in incorrect conclusions. Accordingly, future research might consider (observed and unobserved) heterogeneity in the model. Furthermore, the development of both the interaction effects (which refer to the influence that an additional variable might have on the relationship between an independent and a dependent variable) and moderating effects (implying the involvement of a variable as a moderator, which can change the strength of the relationship between two constructs in the model) were beyond the aim of this article. They are, however, the potential subject of future research. Supplementary considerations might originate from the possible causal relationships among additional manifest variables (and/or different constructs), which can also have an impact on life satisfaction. For instance, research into potential relationships between life satisfaction and employment skills is desirable. In fact, as previous findings suggest, the cognitive component of subjective well-being should be associated with young people's educational and employment situation (e.g., Ben-Shlomo et al., 2022; Easterlin, 2006; Jongbloed & Giret, 2022; Khattab & Fenton, 2009; Schulenberg et al., 2004). As mentioned above, future research agenda could also encompass the implementation and development of this model for each country involved in the analysis, to investigate the differences between them.

Acknowledgments

This article was supported by the TRACK-IN—Public Employment Services Tracking Effectiveness in Supporting Rural NEETs. This project is funded by Iceland, Liechtenstein, and Norway through the EEA and Norway Grants Fund for Youth Employment. The authors are grateful to the three anonymous reviewers for their helpful comments on earlier versions of the article.

Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors.

References

- Akter, S., D'Ambra, J., Ray, P., & Hani, U. (2013). Modelling the impact of mHealth service quality on satisfaction, continuance and quality of life. *Behaviour and Information Technology*, 32(12), 1225–1241.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(1), 187–206.
- Barbagli, M., Castiglioni, M., & Della Zuanna, G. (2003). *Fare famiglia in Italia. Un secolo di cambiamenti*. Il Mulino.

- Bello, B. G., & Cuzzocrea, V. (2018). Introducing the need to study young people in contemporary Italy. *Journal of Modern Italian Studies*, 23(1), 1–7.
- Benghasheer, H., & Saub, R. (2020). Relationships of acculturative stress, perceived stress, and social support with oral health-related quality of life among international students in Malaysia: A structural equation modelling. *Journal of International Society of Preventive and Community Dentistry*, 10(4), 520–529.
- Ben-Shlomo, S., Levin-Keini, N., & Ofir-Barash, E. (2022). Life satisfaction in young adults—The moderating role of parental support. *International Journal of Environmental Research and Public Health*, 19(19), Article 12513.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U., & Morris, P. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Theoretical models of human development* (5th ed., pp. 793–828). Wiley.
- Broschinski, S., & Assmann, M. L. (2020). The relevance of public employment services for the labour market integration of low-qualified young people—A cross-European perspective. *European Societies*, 23(1), 46–70.
- Bynner, J., & Parsons, S. (2002). Social exclusion and the transition from school to work: The case of young people not in education, employment, or training (NEET). *Journal of Vocational Behavior*, 60(2), 289–309.
- Carling, J., & Schewel, K. (2017). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, 44(6), 945–963.
- Cataldo, R., Crocetta, C., Grassia, M. G., Mazzocchi, P., Rocca, A., & Quintano, C. (2021). Sustainable innovation: The Italian scenario studied through higher-order partial least squares-path modeling. *Social Indicators Research*. Advance online publication. <https://doi.org/10.1007/s11205-021-02846-w>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, Article 121092.
- de Almeida, A. N., & Simões, F. (2020). Professional development perspectives across gender and age groups of under-qualified rural NEETs. *Journal of Community Psychology*, 48(5), 1620–1636.
- De Witte, H. (1993). Gevolgen van langdurige werkloosheid voor het psychisch welzijn: overzicht van de onderzoeksliteratuur. *Psychologica Belgica*, 33(1), 1–35. <https://doi.org/10.5334/pb.836>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302.
- Duong, M. T. H., Nguyen, Q. L. H. T. T., & Nguyen, P. T. (2022). Measurement quality of life of rural to urban migrants in Ho Chi Minh City by using partial least square structural equation model. *Journal of Logistics, Informatics and Service Science*, 9(3), 112–128.
- Easterlin, R. A. (2006). Life cycle happiness and its sources. Intersections of psychology, economics, and demography. *Journal of Economic Psychology*, 27(4), 463–482.
- Ellena, A. M., Elena, M., Simões, F., Fernandes-Jesus, M., & Petrescu, C. (2021). Soft skills and psychological well-being: A study on Italian rural and urban NEETs. *Revista Calitatea Vieții*, 32(4), 352–370. <https://doi.org/10.46841/rcv.2021.04.02>
- Enders, C. K. (2022). *Applied missing data analysis* (2nd ed.). The Guilford Press.
- Eurostat. (2018a). *Methodological manual on territorial typologies—2018 edition*. <https://ec.europa.eu/eurostat/documents/3859598/9507230/KS-GQ-18-008-EN-N.pdf/a275fd66-b56b-4ace-8666-f39754ede66b?t=1573550953000>.
- Eurostat. (2018b). *Statistics on young people neither in employment nor education or training*. https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_young_people_neither_in_employment_nor_in_education_or_training

- Eurostat. (2020). *Applying the degree of urbanisation a methodological manual to define cities, towns and rural areas for international comparisons*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/706535>
- Ferrera, M. (1996). Il modello sud-europeo di welfare state. *Italian Political Science Review/Rivista Italiana di Scienza Politica*, 26(1), 67–101.
- Garcia, D., Simões, F., Bettencourt, L., Aguiar, C., Ferreira, I. A., Mendonça, J., Moleiro, C., Rocca, A., & Lendzhova, V. (2023). Predictors of secondary education completion across Portuguese municipalities: Evidence from the 2009–2018 period. *Societies*, 13(9), Article 200.
- Gottlieb, B. H. , & Bergen, A. E. (2010). Social support concepts and measures. *Journal of Psychosomatic Research*, 69, 511–520.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2021). *Advanced issues in partial least squares structural equation modeling (PLS-SEM)*. SAGE.
- Jongbloed, J., & Giret, J.-F. (2022). Quality of life of NEET youth in comparative perspective: Subjective well-being during the transition to adulthood. *Journal of Youth Studies*, 25(3), 321–343.
- Kasprzak, E. (2011). Perceived social support and life-satisfaction. *Polish Psychological Bulletin*, 41(4), 144–154.
- Khattab, N., & Fenton, S. (2009). What makes young adults happy? Employment and non-work as determinants of life satisfaction. *Sociology*, 43(1), 11–26.
- Knies. (2011). Life satisfaction and material well-being of young people in the UK. In C. G. Stephanie & L. McFall (Eds.), *Early findings from the UK's household longitudinal study* (pp. 15–23). Institute for Social and Economic Research, University of Essex.
- Lauro, N. C., Grassia, M. G., & Cataldo, R. (2018). Model based composite indicators: New developments in partial least squares-path modeling for the building of different types of composite indicators. *Social Indicators Research*, 135(2), 421–455.
- Layard, R. (2005). Happiness: Lessons from a new science. *Foreign Affairs*, 84(6), 139–140.
- Lee, S. Y., Song, X. Y., Skevington, S., & Hao, Y. T. (2005). Application of structural equation models to quality of life. *Structural Equation Modeling*, 12(3), 435–453.
- León, M., & Pavolini, E. (2014). “Social investment” or back to “familism”: The impact of the economic crisis on family and care policies in Italy and Spain. *South European Society and Politics*, 19(3), 353–369.
- Lewis, A. D., Huebner, E. S., Malone, P. S., & Valois, R. F. (2011). Life satisfaction and student engagement in adolescents. *Journal of Youth and Adolescence*, 40(3), 249–262.
- Lőrinc, M., Ryan, L., D’Angelo, A., & Kaye, N. (2019). De-individualising the “NEET problem”: An ecological systems analysis. *European Educational Research Journal*, 19(5), 412–427.
- Marcionietti, J., & Rossier, J. (2021). A longitudinal study of relations among adolescents’ self-esteem, general self-efficacy, career adaptability, and life satisfaction. *Journal of Career Development*, 48(4), 475–490.
- Mascherini, M. (2018). *Long-term unemployed youth: The legacy of the crisis*. <https://www.eurofound.europa.eu/it/node/5737>
- Mascherini, M. (2019). Origins and future of the concept of NEETs in the European policy agenda. In J. O’Reilly, J. Leschke, R. Ortiel, M. Seeleib-Kaiser, & P. Villa (Eds.), *Comparing youth transitions in Europe: Joblessness, insecurity, and inequality* (pp. 503–529). Oxford University Press.
- Mawn, L., Oliver, E. J., Akhter, N., Bamba, C. L., Torgerson, C., Bridle, C., & Stain, H. J. (2017). Are we failing young people not in employment, education or training (NEETs)? A systematic review and meta-analysis of re-engagement interventions. *Systematic Reviews*, 6(1), Article 16.

- Mehmetoglu, M., & Venturini, S. (Eds.). (2021). *Structural equation modelling with partial least squares using Stata and R*. Chapman and Hall.
- Melin, R. (2003). *On life satisfaction and vocational rehabilitation outcome in Sweden* [Unpublished doctoral dissertation]. Uppsala University. <https://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-3467>
- Mortimer, J. T., Kim, M., Staff, J., & Vuolo, M. (2016). Unemployment, parental help, and self-efficacy during the transition to adulthood. *Work and Occupations*, 43(4), 434–465.
- Newman, D. A. (2014). Missing data: Five practical guidelines. *Organizational Research Methods*, 17(4), 372–411.
- Ose, S. O., & Jensen, C. (2017). Youth outside the labour force—Perceived barriers by service providers and service users: A mixed method approach. *Children and Youth Services Review*, 81, 148–156.
- Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the satisfaction with life scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, 57(1), 149–161.
- Phan-Thuy, N., Hansen, E., & Price, D. (2001). *The public employment service in a changing labour market*. International Labour Office. <http://digitallibrary.un.org/record/440582>
- Proctor, C., Linley, P. A., & Maltby, J. (2017). Life satisfaction. In *Encyclopedia of adolescence* (pp. 1–12). Springer. https://doi.org/10.1007/978-3-319-32132-5_125-2
- Quintano, C., & Mazzocchi, P. (2020). Examining a multi-dimensional undeclared work via the REBUS-PLS. *Journal of Economic Studies*, 47(2), 405–430.
- Quintano, C., Mazzocchi, P., & Rocca, A. (2020). Examining eco-efficiency in the port sector via non-radial data envelopment analysis and the response based procedure for detecting unit segments. *Journal of Cleaner Production*, 259, Article 120979.
- Reher, D. S. (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review*, 24(2), 203–234.
- Reneflot, A., & Evensen, M. (2014). Unemployment and psychological distress among young adults in the Nordic countries: A review of the literature. *International Journal of Social Welfare*, 23(1), 3–15.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management and Data Systems*, 116(9), 1865–1886.
- Sadler, K., Akister, J., & Burch, S. (2015). Who are the young people who are not in education, employment or training? An application of the risk factors to a rural area in the UK. *International Social Work*, 58(4), 508–520.
- Schoon, I., & Heckhausen, J. (2019). Conceptualizing individual agency in the transition from school to work: A social-ecological developmental perspective. *Adolescent Research Review*, 4(2), 135–148.
- Schulenberg, J. E., Bryant, A. L., & O'Malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology*, 16(4), 1119–1140.
- Shore, J., & Tosun, J. (2019). Personally affected, politically disaffected? How experiences with public employment services impact young people's political efficacy. *Social Policy and Administration*, 53(7), 958–973.
- Simões, F., Fernandes-Jesus, M., Marta, E., Albanesi, C., & Carr, N. (2023). The increasing relevance of European rural young people in policy agendas: Contributions from community psychology. *Journal of Community & Applied Social Psychology*, 33(1), 3–13.
- Simões, F., Meneses, A., Luís, R., & Drumonde, R. (2017). NEETs in a rural region of Southern Europe: Perceived self-efficacy, perceived barriers, educational expectations, and vocational expectations. *Journal of Youth Studies*, 20(9), 1109–1126.

- Smoter, M. (2022). Outreach practices of public employment services targeted at NEET youth in Poland. *Youth & Society*, 54(Suppl. 2), S89–S108.
- Suldo, S. M., Riley, K. N., & Shaffer, E. J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International*, 27(5), 567–582.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, 48(1), 159–205.
- te Riele, K. (2010). Philosophy of hope: Concepts and applications for working with marginalized youth. *Journal of Youth Studies*, 13(1), 35–46.
- Thien, L. M. (2020). Assessing a second-order quality of school life construct using partial least squares structural equation modelling approach. *International Journal of Research and Method in Education*, 43(3), 243–256.
- United Nations. (2021). *Our common agenda: Report of the Secretary-General*. https://www.un.org/en/content/common-agenda-report/assets/pdf/Common_Agenda_Report_English.pdf
- Van Parys, L., & Struyven, L. (2013). Withdrawal from the public employment service by young unemployed: A matter of non-take-up or of non-compliance? How non-profit social work initiatives may inspire public services. *European Journal of Social Work*, 16(4), 451–469.
- Vansteenkiste, M., Lens, W., De Witte, S., De Witte, H., & Deci, E. L. (2004). The “why” and “why not” of job search behaviour: Their relation to searching, unemployment experience, and well-being. *European Journal of Social Psychology*, 34(3), 345–363.
- Walther, A. (2006). Regimes of youth transitions. *YOUNG*, 14(2), 119–139.
- White, B. (2012). Agriculture and the generation problem: Rural youth, employment and the future of farming. *IDS Bulletin*, 43(6), 9–19.
- Zeng, Q., He, Y., Li, J., Liang, Z., Zhang, M., Yi, D., & Quan, J. (2022). Hope, future work self and life satisfaction among vocational high school students in China: The roles of career adaptability and academic self-efficacy. *Personality and Individual Differences*, 199, Article 111822.

About the Authors



Paolo Mazzocchi is an associate professor of Economic Statistics at the Department of Management and Quantitative Studies, University of Naples Parthenope. His expertise refers to undeclared work, the informal sector, the status of being NEETs, and performance evaluations. He is an experienced researcher in project management in the labour market, law, and entrepreneurship, by managing and matching large datasets.



Omeed Agahi is a junior researcher at the Department of Education and Psychology at the University of Girona, Spain. He received a bachelor's degree in Chemistry from Bangor University, United Kingdom, and a master's degree in Leadership for Sustainable Development from Queen's University Belfast, United Kingdom. His academic interests include scientific educational research and all facets of sustainable development.



Mai Beilmann is an associate professor of empirical sociology at the Institute of Social Studies, University of Tartu, Estonia. Her research focuses mainly on children and youth studies, particularly child/adolescent vulnerability in the education system, youth civic and political participation, values, and social capital. Since 2018, she has served as the president of the Estonian Association of Sociologists.



Leonor Bettencourt is a researcher at the Centre for Social Research and Intervention at ISCTE—University Institute of Lisbon and holds a PhD in Social Psychology. Her research interests cover themes such as people–place relationships, acceptance, and impact of new laws and public policies implementation, inclusive education, and youth employment. She is a member of the project TRACK-IN—Public Employment Services Tracking Effectiveness to Support Rural NEETs, funded by the EEA and Norway Grants Fund for Youth Employment.



Rūta Brazienė holds a PhD in Social Sciences (Sociology). She is an associate professor at the Department of Social Policy, Faculty of Philosophy, Vilnius University (Lithuania). Her main areas of interest are labour market and employment policies, employment of vulnerable groups (youth, women, elderly, disabled, etc.), youth transition from education to the labour market, NEET youth, and housing provision for the youth.



Natalia Edisherashvili (PhD) is a researcher at the Institute of Education, University of Tartu. Her recent research activities have been related to exploring the interventions that contribute to technology-enhanced teaching and learning. She has participated in the elaboration of the online courses for country-wide teacher professional development. The courses include a focus on ICT skill integration in the instruction process in Georgia. Natalia has also been actively involved in consultancy work for international funding agencies such as UNICEF, Millennium Challenge Corporation (MCC), Asian Development Bank (ADB), and the United States Agency for International Development, which resulted in policy recommendations to the Ministry of Education and Science of Georgia.



Dilyana Keranova holds a PhD in Sociology and is a chief assistant professor at the Department of Sociology at the South-West University “Neofit Rilski,” Bulgaria. Her research interests include child and youth well-being, the process of deinstitutionalisation of childcare in Bulgaria, media ecology, media and digital literacy, bullying, cyberbullying, sociology of deviance, environmental citizenship and the education for environmental citizenship, and volunteering. She has participated in various scientific projects and research, international and national.



Elena Marta is a full professor in Social and Community Psychology at the Catholic University of the Sacred Heart, where she is also the director of CERISVICO—Research Centre on Community Development and Organisational Quality of Life. Her research interests lie in the field of community and applied social psychology, with a focus on the social relationship of adolescents and young adults, NEET, volunteerism and risk behaviours, community development, and participatory action research.



Valentina Milenkova (PhD) is a professor and head of the Department of Sociology at South-West University, Bulgaria. Her research interests are particularly focused on policies for young people and rural communities, as well as the social significance of education and lifelong learning. Milenkova has been engaged in many international research projects. She has more than 120 publications in national and international journals and proceedings.



Niall O'Higgins (PhD, European University Institute, Florence) is a senior research specialist in the International Labour Organization's Employment Analysis Unit. He is one of the main authors of the International Labour Organization's biennial *Global Employment Trends for Youth*. Other recent publications include books on internship and youth employment policy, a chapter on NEETs in the International Labour Organization's *Global Employment Policy Review 2023: Macroeconomic Policies for Recovery and Structural Transformation*, and articles in the *European Economic Review*, the *Cambridge Journal of Economics*, the *Journal of Institutional Economics*, and the *B. E. Journal of Economic Analysis and Policy*.



Federica Pizzolante obtained a PhD in Economics, Statistics and Sustainability in 2022 at the University of Naples Parthenope. Her dissertation on the road transport sector involved the analysis of CO₂ emission time series. In Siena, she obtained her master's degree in Economics, with a focus on environmental economics and sustainable development (2018). She is part of the Parthenope Research team for the TRACK-IN project.



Òscar Prieto-Flores is an associate professor at the School of Education and Psychology, University of Girona. He holds a PhD in Sociology from the University of Barcelona and he has been a visiting scholar of the Center for Migration and Development at Princeton University and of the Center for Comparative Studies in Race and Ethnicity at Stanford University. Professor Òscar Prieto-Flores also coordinates the master's programme of Migration Movements During the 21st Century at the University of Girona and is a chair of the Department of Education (Pedagogy).



Antonella Rocca is an associate professor in economic statistics at the University of Naples Parthenope, Italy. She held her PhD in Spatial Statistics. She is the author of more than 80 publications in peer-reviewed journals and books on topics related to the labour market, NEETs, youth unemployment, gender gap, education, and digitalisation. She is also a member of COST Action CA18213 Rural NEET Youth Network and WP3 leader of the EEA Grant project TRACK-IN—Tracking Public Employment Services Tracking Effectiveness in Supporting Rural NEETs.



Ricardo Borges Rodrigues is an invited lecturer at ISCTE—University Institute of Lisbon (since 2012) and an integrated researcher at the Centre for Social Research and Intervention. With a PhD in Social and Organisational Psychology, he conducts research and intervention on intergroup relations in childhood and adolescence, focusing on processes of racial-, ethnic-, and gender-based inclusion and exclusion in educational contexts. He is the director of the master's programme in Psychology of Intercultural Relations (since 2013), and also serves as local academic co-coordinator of the Erasmus Mundus Global Mobility, Inclusion, and Diversity in Society (Global Minds) project.



Miriam Rosa (PhD in Social and Organisational Psychology) is a researcher and professor at ISCTE—University Institute of Lisbon. Her research includes diversity and inclusion at work, with a focus on disadvantaged groups in current and future job opportunities. She has been awarded grants through competitive calls, collaborates with (inter)national research scholars and industries, has published in high-impact journals, and has trained young researchers. She is a team member of the project TRACK-IN.



Francisco Simões is an assistant researcher and a full member of the Centre for Social Research and Intervention at the ISCTE—University Institute of Lisbon. He is also the chair of the COST Action Rural NEET Youth Network funded by the European Commission and principal investigator of the TRACK-IN project funded by the EEA and Norway Grants. His research focuses on adolescents' social development and well-being, social support, and rural NEETs' psychosocial profile. He has (co)authored several international peer-reviewed articles on these issues.



Borislav Yurukov is currently a professor of informatics and computer sciences at the Faculty of Mathematics and Natural Sciences, Informatics Department, South-West University "Neofit Rilski," Bulgaria. He is also rector of the South-West University "Neofit Rilski." Professor Yurukov's areas of expertise include bioinformatics, mathematical logic, applied mathematics, discrete structures, mathematical optimisation, and computer modelling. Professor Yurukov is an author and co-author of numerous publications in highly cited journals and has participated in numerous international scientific projects.