

Scrutinising the Exceptionalism of Young Rural NEETs: A Bibliometric Review

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Abstract

The situation of rural NEETs aged 15 to 24 remains understudied. However, transitions from adolescence to emerging adulthood are very demanding for those in the countryside. Our paper discusses this gap by characterising the scholarship focusing on rural NEETs. We undertook a bibliometric review based on 325 entries on Web of Science (WoS) using the Bibliometrix analysis package. Our approach included descriptive bibliometric analysis, co-citation networks assessment, and thematic analysis. Our findings show that the investigation efforts depicting younger rural NEET are recent and marginal in the larger context of international NEETs scholarship. The field is dominated by economy- and sociology-led networks. Concerns regarding health and employment issues are central in international publishing trends, showing a dominant youth-at-risk approach to this group. Still, themes associated with adolescent NEETs and relevant programs' assessment are gaining traction. Our findings show a need for funding research initiatives to reduce the invisibility of young rural NEETs.

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Keywords

NEET, rurality, youth, bibliometric review

Introduction

Popular and scientific literature have often portrayed young people who are Not in Employment, nor in Education or Training (NEETs) as if falling between the cracks of the educational and labor systems. They are characterized by standardized biographies and thus are made to all look alike (Furlong, 2006). However, distinct sets of factors justify a closer look at the diversity found amongst NEETs, beginning with socio-developmental factors.

Different age ranges are applied to NEETs across the globe. In Europe, for instance, the NEETs label encompasses young people aged 15 to 34 (Eurostat, 2020). This wide age range acknowledges the fragmentation of school-to-work paths, leading to multiple transitional trajectories across entire generations of young people worldwide (Arnett et al., 2011). Transitions have indeed become longer and more erratic, especially amongst NEETs, with many combinations between education and professional decisions being feasible, ahead of an independent life (Walther, 2006). However, there is a risk of using the NEET label without considering the distinct developmental challenges of adolescence and emerging adulthood. The later years of adolescence are marked by biological maturation, the development and use of abstract thinking, the renegotiation of the relationship with parents/caregivers, or an overall experience of different social roles (Zarrett & Eccles, 2006). These developmental lines are reshaped during emerging adulthood as relationships evolve from dependence to reciprocity, but also start to be characterized by a deeper experience of, and commitment to, social roles. These changes are also labeled as “re-centring” and are expected to be accomplished in a period marked by the attainment of wisdom-related knowledge and judgment, higher sensitivity to emotional stimuli, and/or greater risk-taking compared to older adults (Arnett et al., 2011).

NEETs diversity will not be entirely captured if developmental paths are not contextualized according to significant differences across countries in terms of the institutional support provided to young people in order to ease school-to-work transitions (Walther, 2006). School-to-work institutional support varies from universalistic transition regimes (typical of Scandinavian countries that ensure a strong public investment in secondary and tertiary education), as well as on on-the-ground, comprehensive employment services; to sub-protective transition regimes that characterize Southern European countries, plagued by unequal access to tertiary education and which are dominated by low quality, informal support for job seekers (Almeida & Simões, 2020; Bello & Cuzzocrea, 2018); or, finally, to very

loose formal support structures in the Global South countries, especially in rural areas (Wilkinson et al., 2017).

The most prominent criticism in relation to NEETs homogenization have addressed developmental and institutional support intricacies of transitional paths (e.g., Furlong, 2006; Mascherini, 2019). Still, these claims have remained insensitive to the urban/rural divide affecting the odds of becoming NEET at earlier ages. This trend is well documented in Europe, with the available figures showing territorial inequalities across the continent. In 2019, 10.10% of youths in EU28 aged 15 to 24 were NEETs. Their general distribution was balanced across EU rural areas (10.70%), suburbs (10.40%), and cities (9.40%). However, NEETs' rates within this age bracket in rural areas range from 3.20% in The Netherlands to 18.70% in Serbia, 19.00% in Italy, and 23.90% in Bulgaria (Eurostat, 2020).

Is the international scholarship reacting to the greater probability of becoming NEET in rural areas? Moreover, how are younger, rural NEETs being portrayed in the literature? These two key questions justify our work, leading to two main goals.

Firstly, we intend to characterize the knowledge about rural NEETs aged 15 to 24 in the context of the international scientific literature. Overall, younger rural NEETs remain an invisible segment of a youth group in research agendas. This is particularly worrisome in the aftermath of COVID-19 considering that greater proportions of rural NEETs will occur in European countries (International Labour Organization, 2020), especially in those where institutional support to school-to-work transition is more ineffective (Bello & Cuzzocrea, 2018).

Secondly, we want to highlight how reports on younger rural NEETs fit within the main thematic trends found in the literature. Our intention here is two-folded. On one hand, we seek to depict the research dynamic on the field: what are the dominant disciplines and themes involved in research about NEETs; if these efforts are parallel or if they are connected between each other; where do reports on younger rural NEETs seem to fit best in these trends. On the other hand, we are particularly interested in understanding how much scholarship addresses younger rural NEETs singularities, including less and lower quality educational alternatives (Almeida & Simões, 2020), greater exposure to unemployment and precariousness (Eurostat, 2020), or greater disengagement regarding public services (European Commission, 2018a).

Conflicting Notions? Rurality, Youth, and NEETs

Although NEETs are attracting more attention from politicians and society, it seems that scholars are not inclined to better understand the situation of

younger rural NEETs. This gap is explained, in part, by tacit conflicts between the notions of rurality, youth, and NEETs (Farrugia, 2016; Simões, 2018).

It would be easy to say that rural areas are those located outside urban clusters. However, in practice, a distinction between urban and rural has been based on different criteria such as the size of the population, the importance of the primary sector in the employment structure, or the official status of the place (Zilite, 2020). This is a cross-continental debate. In Europe, for instance, in 2010 the European Commission agreed on a new typology of *predominantly rural*, *intermediate*, and *predominantly urban* regions. The method builds upon a simple approach to create clusters of urban grid cells with a minimum population density of 300 inhabitants per square km and a minimum population of 5,000. All the cells outside these urban clusters are considered as rural. However, the distinction between urban and rural-based solely on the size of the population does not always offer a satisfactory basis for classifying a territory. Other factors must be accounted for when describing a rural region, including the diversity of the socio-economical resources (i.e., human, material, non-material), local populations' sense of belonging, and self-identification of inhabitants with a rural area (Zilite, 2020).

It is also important to note that youth definitions vary across countries. For statistical purposes, the United Nations defines youth as persons aged 15 to 24. The Secretary-General first referred to the current definition of youth in 1981 in his report to the General Assembly concerning International Youth Year. However, the Secretary-General also recognized that apart from the statistical definition, the meaning of the term "youth" varies in different societies around the world. When the General Assembly, via its resolution in 1995, adopted the World Programme of Action for Youth to the year 2020 and beyond, it reiterated that the United Nations defined youth as the age cohort of 15 to 24. The General Assembly in 2001 and 2008 and the Commission for Social Development in 2017 also adopted the same age-group for the category of "youth" (UNDESA, 2013). The definition of youth as those fitting the 15 to 24 age cohort usefully serves statistical purposes for assessing the needs of young people and thus providing guidelines for youth development. However, this criteria fails to capture the above mentioned developmental differences between late adolescents and emerging adults, as well as the fragmentation of school-to-work paths and the social dynamics behind that diversification (Arnett et al., 2011).

The NEETs indicator is a good example of a new approach to capturing different experiences of young people. The label emerged in the mid-90s in the UK in order to describe the situation of young people aged 16 to 18 years old who were not enrolled in education and who were also not eligible for unemployment benefits (Petrescu et al., 2020). At the European Union level,

the NEETs age range was first set at 15 to 24 by the European Commission's Employment Committee as part of the Europe 2020 strategy indicators. This decision was made in order to allow cross-country comparisons amongst Member States. However, the NEETs indicator is now reported for those aged 15 to 34, meaning that consensus is far from a globally accepted standard on this matter (Eurostat, 2020). Additionally, the focus on NEETs (including at the policy monitoring and making levels) has mainly been led by a youth at risk approach. This is understandable, when taking into account the fact that the odds of becoming NEET are challenging conditions. These can include: dropping-out from education at an early stage; being an immigrant; having parental low human capital; a difficult financial situation; chronic somatic diseases; and mental problems (Tomczyk et al., 2018).

The notions of rurality, youth, and NEETs mingle in an intricate manner. Public discourse is dominated by dramatic representations of rural areas, describing them as shrinking or deprived territories (Bæck, 2016), marked by uselessness and chronic structural injustice (Pedersen, 2018). These images form a notion of "rural horror" that clashes with the idea of viable futures in these areas. Consequently, there are current visions that younger generations in the countryside are decreasing, or that young people are not supposed to flourish in rural areas. These ideas contain imprecisions and, to some extent, are biased, even in aging Europe. In fact, while youth populations aged 15 to 24 living in EU28 rural regions have decreased between 2009 and 2019, a quarter of the population in this age bracket (24.50%) lives in the countryside (Eurostat, 2020). Moreover, in some Northern (e.g., Denmark), Central (e.g., Germany), and Southern (e.g., Portugal) European countries, the absolute figures of youth population are actually increasing (Eurostat, 2020; Simões et al., 2020). These facts are insufficient to balance metro-centric representations of young people's school-to-work transitions and which limit their hopes, dreams, and futures to cities and an urban way-of-life (Farrugia, 2016). Thus, in brief, the combination of rurality with youth and NEETs conceptualizations is characterized by a mixture of misperceptions and indifference. On the one hand, rurality and successful youth biographies are rendered as incompatible; consequently public and private investment in infrastructure and human capital in the countryside suffers (Bæck, 2016). On the other hand, we are left with a correlation between rurality and high shares of NEETs in countries with less efficient institutional support mechanism which remains overlooked.

NEETs Heterogeneity: The Case of Young Rural NEETs

A beneficial contribution to improve the combination of rurality, youth, and NEETs is to expand on-going research efforts to capture NEETs

heterogeneity. Some research has been undertaken on that matter, with Mascherini's (2019) NEETs typology being amongst them. This typology establishes a clear contrast between re-entrants (short-term NEETs, who are about to re-enter education or the labor market), unemployed, inactive, and voluntary NEETs. It also sets out further distinctions between short- and long-term unemployed NEETs, as well as between different reasons for becoming an inactive NEET (including family care duties, mostly affecting women, physical or mental impairments, or general discouragement).

Whilst Mascherini (2019) illustrates how scholarship has led to a more fine-grained NEETs profiling, "place of origin" has been kept outside the profiling criteria. Consequently, a whole set of specific challenges that come to affect younger rural NEETs is being disregarded. To begin with, rural areas worldwide struggle with a strong flux of youth out-migration flows which overlaps with the transition from adolescence to adulthood and from secondary education into tertiary education. As a result, there is an increase of the share of young people under-24 remaining in rural areas, coming from poorer households, and displaying lower educational and professional capital. Thus, from an early age, a larger proportion of rural emerging adults are more exposed to low-qualified jobs, precarious employment, and longer unemployment spells. A complete vicious circle is closed around them as they will not have enough resources to move away (Carling & Schewel, 2018). Many of them come to cope with these barriers through cognitive dissonance, by convincing themselves that their native area is better than others (Anton & Lawrence, 2014) or by fatalistically accepting their situation (Almeida & Simões, 2020).

Women are overrepresented in rural youth out-migration fluxes, mostly due to greater female educational aspirations, and specifically in Western countries, leading to a negative masculinization phenomenon (Leibert, 2016). This gender-gap amongst rural young generations is further widened by an employment structure offering male-dominated jobs in agriculture or small industries (Leibert, 2016), or narrow traditional roles that limit women's professional fulfillment outside the household (Farrugia, 2016). Therefore, in both developed and developing countries young women staying in rural areas tend to be those who are less educated, more likely to be dedicated to family care duties and, consequently, with a greater risk of remaining for larger periods as NEETs (Maunay, 2014; Sadler et al., 2015).

Younger rural NEETs' high rates also reflect specific school-to-work transition challenges in the countryside. School systems in rural areas on different continents struggle with greater infrastructural deficits, paired with lower capacities to attract high quality teachers (Reagan et al., 2019). Alongside this, available curricula (particularly in the vocational training field) is often unmatched

with local resources and promising economic opportunities. This creates a misalignment with potential opportunities for NEETs in those areas (Simões & Brito do Rio, 2020). Starting in late adolescence, an insufficient educational offer complicates NEETs school-to-work transitions in rural areas. These structural shortcomings are further amplified by employment services that struggle to reach out to marginalized young people in these regions (European Commission, 2018a). Mismatched policy-package aspirations vis-à-vis regional specific requirements and local services' shortages of resources also impact negatively such transitions (Shore & Tosun, 2019). Thus, whilst the overall NEET figures have declined after reaching their peak in 2013, especially in Europe, and policy instruments such as Youth Guarantee and international initiatives including the Sustainable Development Goals have been put in place, it remains unclear how much these initiatives have been effective in reducing younger rural NEETs rates as compared with unintended trends such as youth out-migration.

The economic structure of rural areas also poses specific challenges to adolescents and emerging adults. The rural economy is usually described as a declining one, overwhelmed by the dismantling of industrial capacity, and the consequent loss of trained and/or skilled human capital. This scenario leaves behind entire generations without the opportunity to learn and to be mentored by older professionals (Zipin et al., 2015). Moreover, agriculture remains a pivotal economic sector in the countryside, but not without problems. The sector is mostly an aging one, struggling to attract, and retain those outside the sector, including NEETs (Simões, 2018). There are exceptions to this negative scenario, with some regions showing a vigorous services sector able to offer a considerable number of jobs, including for young women (Corbett, 2007). Others are managing to modernize agricultural activities through eco-agriculture and thereby increase their value (Simões & Brito do Rio, 2020). However, the path to a job in rural areas remains narrower and that must be accounted for when interpreting NEETs rates in the transition to adulthood.

Present Study

With this work we intend to: (a) describe the knowledge about rural NEETs aged 15 to 24 in the context of the international scientific literature; and (b) highlight how reports on younger rural NEETs fit into the main thematic trends found in the literature. Our central hypothesis is that papers focusing on young, rural NEETs are scarce and spread out across different themes, thus displaying an unstructured field of inquiry.

We start by presenting in detail the methodological approach to our research goals. This includes a step-by-step description of the bibliometric

analysis which we implemented. Afterwards we present the results, duly supported by data visualization techniques. Finally, we discuss in detail the results, based on our goals, the insights arising from our analyses, the implications for NEETs scholarship, and the limitations of our work.

Method

To address our research goal, we conducted a bibliometric analysis following the five steps for science mapping proposed by Zupic & Čater (2015). Firstly, we established the *study design*, aiming at: (a) establishing the knowledge base of the NEET research field as well as the main contributors to this research realm; (b) identifying the social network structure of the scientific community dedicated to research on NEETs; and (c) identifying its most relevant research themes.

Subsequently, we conducted a *data collection* using the Web of Science, Social Science Citation Index as our source based on some inclusion criteria. The selected documents should: (a) focus on rural NEETs; (b) be peer-reviewed articles; (c) have been published anytime until 2020; and (d) be written in English. Data collection included two search steps to cope with our search criteria. Firstly, we looked for articles including the terms “NEET” OR “Not in Education, Employment, or Training” OR “Status 0” OR “disconnected youth.” We considered these terms to make sure that we included all labels that could apply to NEETs, including older ones (“Status 0”) and those that overlap with this group (namely “disconnected youth”). Afterwards, we added the term “Rural” to the selected works in the first step in order to identify those that focused on rural NEETs. These search steps were applied to abstracts and keywords. Data was later converted into a database in the Bibtex format.

Next, we conducted a *data analysis*, involving three steps. Firstly, we ran a descriptive bibliometric analysis to establish the most important publication trends. Then we moved to the creation of a co-citation network matrix to better capture the collaborative networks amongst authors. Finally, we conducted and mapped a cluster thematic analysis in order to uncover the most relevant research themes concerning NEETs. In the field of bibliometric analysis, thematic maps are based on the clusters of keywords and these clusters are accepted as themes. Themes are positioned on the map according to their density and their centrality (Cobo et al., 2011). *Density* is the strength of internal ties amongst all keywords describing the research theme. *Centrality* corresponds to a theme’s relevance in the co-occurrence keywords network.

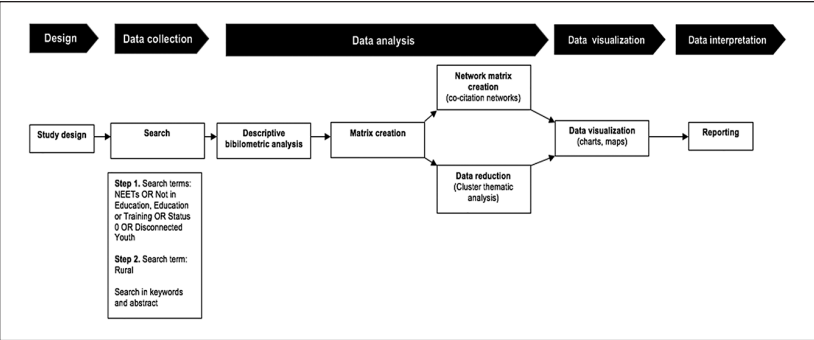


Figure 1. Bibliometric analysis workflow.
Source. Adapted from Aria and Cucurullo (2017).

Following this, we prepared *data visualization* (charts and maps) to duly present our results before moving to the *interpretation* of the results for reporting. During all data processing stages, we systematically identified the papers focusing on rural NEETs aged 15-24.

We conducted our analysis using the Bibliometrix analysis package (Aria & Cuccurullo, 2017). This is an open-source software developed in R language designed to conduct bibliometric analyses and a wide variety of statistical and graphical analysis that are customized by researchers according to their research goals.

Figure 1 depicts our analysis workflow.

Results

Descriptive Bibliometric Analysis

Our descriptive analysis allowed us to characterize publication, citations, and literature geographic distribution trends.

Figure 2 summarizes the publication trends from 2002 to 2020. Our first research step led to 323 documents, 262 of which were published in academic journals, involving 624 scholars. No duplicates were identified. Our second search, focusing on rural NEETs, delivered 14 documents written by 41 authors.

Our results show that after a slow start between 2002 and 2006 ($\hat{f}_i=5$), the number of papers on NEETs showed a slow increase from 2007 until 2012 ($\hat{f}_i=11$). After 2013, the number of articles concerning NEETs showed a

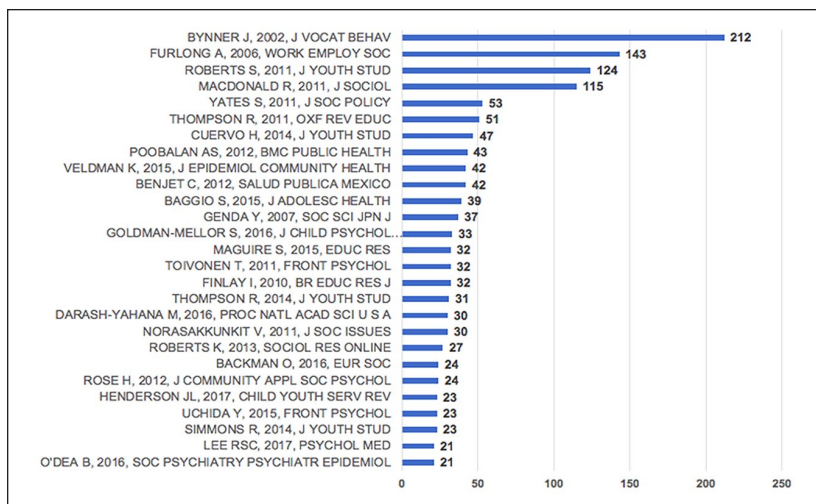


Figure 2. Most cited documents (NEETs, Top 30, First Author).

rapid increase, reaching a peak in 2020 ($\hat{f}i=49$). Meanwhile, rural NEETs were less interesting for the academic world ($\hat{f}i=14$) with all the identified documents being published from 2012 onwards. Importantly, from these 14 articles, 9 were focused on NEETs aged 15 to 24 or somewhere in between (e.g., 18–24 years old).

We also examined the most influential publications. We found that the most influential outlet for academic articles about NEETs is the *Journal of Youth Studies* ($\hat{f}i=37$; H-Index=11). Others included: *Research in Post Compulsory Education* ($\hat{f}i=7$; H-Index=2); *Social Science Japan Journal* ($\hat{f}i=7$; H-Index=2); the *Journal of Education and Work* ($\hat{f}i=6$; H-Index=2); the *Social Indicators Research* ($\hat{f}i=6$; H-Index=3); *Early Intervention in Psychiatry* ($\hat{f}i=5$; H-Index=2); *Educational Research* ($\hat{f}i=5$; H-Index=5); and the *Annals of the American Academy of Political and Social Science* ($\hat{f}i=5$; H-Index=1). These are the outlets amongst which there have been published five or more articles from 2002 onwards. These figures show that the *Journal of Youth Studies* is the dominant source regarding the topic. The overall impact (measured in terms of H-Index) of these top journals ranges from 19 (the *Social Science Japan Journal*) to 412 (the *British Medical Journal*). Our calculations also show that there is no correlation between the overall impact of the journal and the impact of articles published in that journal ($r=-.03$).

The number of articles covering rural NEETs is low, so a similar analysis cannot be made as with the one undertaken for all the documents. Still, the Journal of Youth Studies published two articles about rural NEETs (Miller et al., 2015; Simões et al., 2017). Both studies included NEETs aged 15 to 24 years old, but did not target this age group exclusively.

Moreover, we characterized the papers in our dataset that were cited 30 times or more. Four articles were cited more than 100 times. The most cited article was written by Bynner and Parsons (2002) ($f_i=212$ citations), followed by Furlong's (2006) ($f_i=143$ citations), Roberts (2011) ($f_i=124$ citations), and MacDonald's (2011) ($f_i=115$ citations). None of these works specifically focused on younger rural NEETs. Figure 2 summarizes this part of the analysis.

Our descriptive bibliometric analysis also allowed us to examine the geographic distribution of NEETs scholarship across the globe. According to our findings, 624 authors are distributed across 49 different countries. The most relevant contributing countries, in terms of authorship, are: the United Kingdom ($f_i=205$); the United States ($f_i=145$); Australia ($f_i=74$); Italy ($f_i=53$); Norway ($f_i=35$); and Denmark ($f_i=29$). Altogether, these countries contribute to 81% of all the authorship in the NEETs field. China ($f_i=24$) and Mexico ($f_i=22$) are the most relevant countries contributing to authorship in the Global South. The rural NEETs domain is notably different. We identified 37 authors, with the top five contributing countries giving the following figures: Australia ($f_i=10$); UK ($f_i=8$); Portugal ($f_i=6$); United States ($f_i=5$); and Russia ($f_i=3$). However, it is important to note that whilst the Australian and the North American authors correspond to only one paper each, Portuguese authors are involved in four articles.

Advanced Descriptive Analyses

Co-citation matrix. Figure 3 depicts a co-citation matrix. Co-citation matrices display clusters departing from a nodal point which corresponds to the most relevant author within that cluster. Clusters are established based on the number of co-cited authors.

Our co-citation matrix shows a clear focus on economic and sociological approaches to NEETs. The green cluster, located at the bottom of the map, departs from two nodal points, namely the Eurofound or the OECD. These institutions have produced key econometric analyses about NEETs for the past decades under consideration. This cluster aggregates authors that are associated with these institutions (e.g., Mascherini) as well as other economists (e.g., Pastore). Two other networks are mostly sociologically-driven.

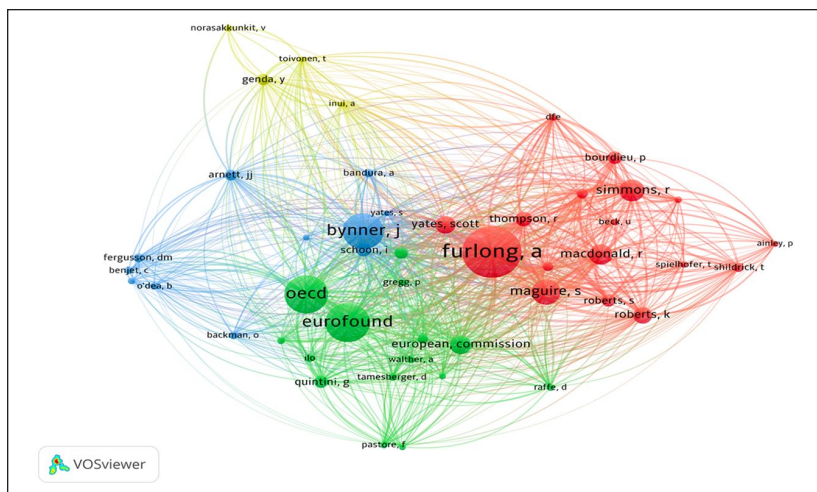


Figure 3. Co-citation network map—Authors.

Note. The first letter of names of authors/institutions is not capitalized by the program by default.

The red cluster is aggregated around a nodal point departing from Furlong. This cluster includes papers dedicated to defining and describing NEETs, as well as to criticizing the homogenization of the group. The blue cluster departs from Bynner's work and is mostly dedicated to framework NEETs within the context of the school-to-work transition. This cluster includes contributions from the social and developmental psychology realm, by authors such as Arnett, Bandura, or Schoon. Finally, the yellow cluster is driven by psychological research, including topics such as marginalization or the motivational factors associated with the NEET status. However, in this cluster, no nodal point is as clear as in the case of other clusters. As expected, the network map shows that these clusters are not independent, with multiple connections between them being observed.

Cluster Thematic Analysis

In Figure 4, our thematic map shows four different types of themes which are automatically labeled by Bibliometrix. *Basic Themes* are located at the lower right quadrant. In co-occurrence keywords networks, these themes show loose internal ties amongst keywords (low density), but have a high degree of centrality (importance) compared to other keywords combinations. Two clusters can be found in this quadrant. The major one is *Employment*. This cluster

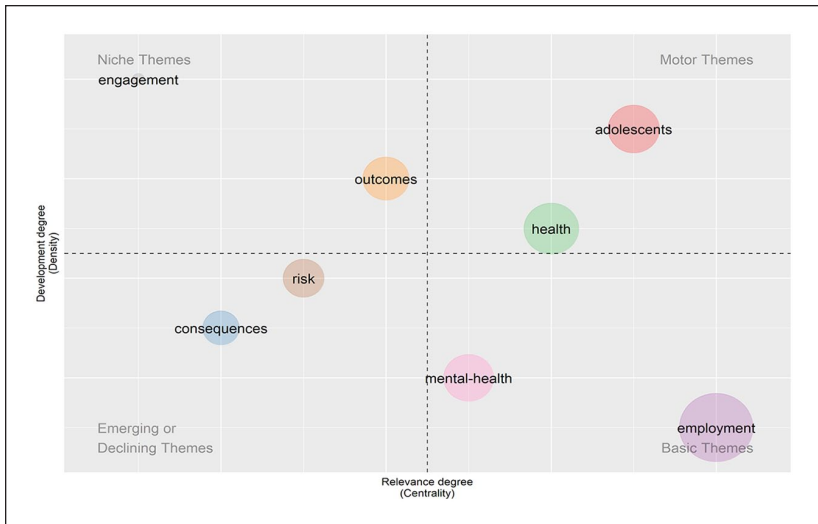


Figure 4. Thematic map of keywords of the articles (NEET).

indicates that the instrumental aspects associated with NEETs are central in scholarship, aggregating keywords such as: “school,” “employment,” “unemployment,” and “work.” *Mental Health* is also located in this quadrant. This cluster is smaller than the Employment one, showing a slightly greater connection between keywords such as: “health,” “depression,” “disorders,” “adolescents,” “prevalence,” and “consequences.”

Motor Themes, located in the upper-right quadrant, have both higher density and centrality so they are both important and developed in the field. *Adolescents* is the highest ranked theme here, showing a positive evolving trend around terms such as “adulthood,” “achievement,” and “attainment.” *Health*—aggregating keywords such as “prevalence,” “adolescence,” and “disorders”—is a secondary theme cluster in this quadrant.

Niche Themes is located in the upper-left quadrant. These are themes that are not central in research, but which show a high development around strongly connected keywords. The map presents two niche themes. *Outcomes* is a theme organized around terms such as “inequalities,” “care,” and “experiences.” Besides this, *Engagement* is a theme associated with keywords such as “interventions,” “life,” and “school performance.”

Finally, *Emerging/Declining Themes* are located in the lower-left quadrant having a lower level of centrality and of density. The first cluster that we find in this quadrant is *Risk*, aggregating concurrent keywords such as: “gender,” “mortality,” “patterns,” and “barriers.” The second is labeled *Consequences*,

including co-occurring keywords networks with terms such as: “self,” “culture,” “attitudes,” and “depression.”

Bibliometrix does not permit locating specific papers in clusters, thus we analyzed titles and keywords of papers focusing on rural NEETs in order to understand the main thematic trends. We found that Employment issues were targeted by six papers, followed by Risk ($\hat{f}=4$), Education ($\hat{f}=2$), and Health ($\hat{f}=2$).

Discussion

Our first goal was to depict the knowledge about rural NEETs aged 15 to 24 in the context of the international scientific literature. Our descriptive bibliometric analysis shows that the literature on rural NEETs is very marginal. The absolute number of publications is low, the main authors rarely report specifically on the situation of rural NEETs, and there is a clear gap in research efforts dedicated to younger, rural NEETs. We also found that international research on NEETs is biased toward Anglo-Saxon and Western countries. However, works published on rural NEETs are beginning to emerge in countries that contradict this trend (e.g., Portugal).

Our second goal was to highlight how reports on younger, rural NEETs fit within the main thematic trends found in the literature. We addressed this by conducting co-citation and thematic analyses. Our co-citation analysis depicts that economical and sociological approaches to NEETs' challenges are dominant and more structured. Economy-led research efforts are being pulled mainly by international institutions, with a strong focus upon informing policy-making, especially at the European level. Beyond this, sociological research networks are roughly divided into two groups. The first focuses on *the definition* of NEETs, including a critique to the depiction of this group as a homogeneous one (e.g., Furlong, 2006). The second focuses on several aspects of *the transitional paths* from school-to-work that affect this group (e.g., Bynner & Parsons, 2002). A network of psychological research, aiming at understanding motivational or discrimination issues is also emerging but it yet remains rather loose.

Aside, our thematic analysis indicates that employment and health are central themes in international scientific production concerning NEETs. However, these basic themes are paralleled by motor themes which are shifting research agendas toward understanding NEETs education and health trajectories earlier in their lives. This somewhat prospective examination of NEETs trajectories is coupled with a niche literature dedicated to interventions that address NEET requirements. These niches combine the assessment of outcomes stemming from school- and community-based interventions

designed to mitigate the negative effects of becoming/being NEET. Beyond this, both emerging and declining themes seem unstructured and may be covering new trends that will become more relevant in the years to come (e.g., NEETs gender inequalities). More importantly, when analysing titles and keywords of reports focusing on rural NEETs, we found that employment is the main research concern, further contributing to the centrality of this theme in the literature. Moreover, our results do not indicate that rural NEETs, especially younger ones, are in the spotlight of upcoming trends.

We find our results both worrisome and provocative. We believe our findings are worrisome, because cutting-edge international scholarship is not covering major NEETs trends. Rural NEETs rates are higher in Southern and Eastern European countries. Therein, one out of four or five rural youths aged 15 to 24 are NEETs (Eurostat, 2020). In the global South, rural NEETs rates are even higher. More importantly, the most relevant scientific efforts are not offering a more complete picture of NEETs diversity by depicting younger rural NEETs singularities (Furlong, 2006; Mascherini, 2019). These singularities are evident at both the individual/developmental level, as well as at the contextual level.

At the individual level, rural NEETs trail more unstable developmental paths due to greater uncertainties in the transition to adulthood. Compared to urban young people, rural younger generations enter the labor market earlier, are more often involved in precarious or informal jobs (Almeida & Simões, 2020), and have higher mobility expectations (Farrugia, 2016). This ultimately results in greater difficulties to fulfill developmental tasks combined under the label “re-centering” (Arnett et al., 2011).

At the contextual level, on-the-ground institutional support is unstructured or inefficient especially in countries toward the South and the East of the Globe (Walther, 2006; Wilkinson et al., 2017), leaving rural NEETs more exposed to a complex combination of several structural risks. With some exceptions (Corbett, 2007), rural areas are more often economically deprived, offering mostly low-skilled, precarious jobs to youths showing less educational resources and professional experience (Almeida & Simões, 2020). Thus, rural younger generations are particularly vulnerable to keep coming in and out of the NEET status, especially in the case of women (Sadler et al., 2015).

It is easy to conclude that the publication trends that we found may simply reflect that social scientists have overlooked this gap. But things might be a bit more complicated. International publishing trends may be showing, on one hand, an overall publishing bias toward metro-centric research topics: this is a predictable distortion. In spite of figures showing the opposite in some countries, including in Europe (Eurostat, 2020), rural areas are repeatedly presented as demographically shrinking regions (Bæck, 2016),

where finding youths is virtually impossible. Conversely, youths and cities representations match, because cities are places with a future, where hopes and dreams can be fulfilled (Farrugia, 2016). The fact is that, for instance, a quarter of the youth population still lives in European rural areas, with big shares of those in transition to adulthood and in greater need, something that researchers simply cannot ignore. Moreover, an Anglo-Saxon research trend in international publishing regarding NEETs might also reflect the scarcity of research funds in Southern/Eastern Europe and the Global South, thereby preventing sound investigation which meets international publishing standards. This trend might be further expanded if editors disregard scholarship from these countries as well as their audiences. Taken together, these barriers will only contribute to keeping young rural NEETs visible in figures, whilst their biographies remain hidden. Still, our interpretation must be addressed carefully. Our results may only reflect a lack of visibility of Global South and Eastern European scholars' in major international publishing instead of a lack of good quality, on-the-ground research.

Our results are provocative in two distinct ways. Firstly, co-citation networks show the clear relevance of economy-driven research, led by major international institutions (e.g., Eurofound). Our thematic analysis further substantiates this conclusion, considering the centrality of employment-related issues, such as school-to-work transitional paths, or job searches and finding dynamics. Institutional reports have a most-needed instrumental value since they can guide policymaking. Until now, it is arguable that political proclamations have made the best use of this information, to say the least. For instance, in Europe and in countries hard-hit by high NEETs rates (such as Italy), broadband policy packages have been directed to the most vulnerable youths, but the results seem inconsistent (Bello & Cuzzocrea, 2018). In part, these flaws stem from an inadequate translation of European policy packages to national and regional decision-making (Shore & Tosun, 2019). Now that new policy instruments such as the EU Youth Strategy (European Commission, 2018b) have put vulnerable rural young generations' futures in the spotlight, it will be interesting to see how much this bulk of literature will be helpful to inform the segmentation of these instruments at the national and the regional levels in order to address younger rural NEETs' needs.

Secondly, our results also illustrate how the NEETs research field is on the verge of important developments. Whilst the sociological focus on basic concepts, typologies and transitional paths will certainly remain pivotal, our co-citation and thematic analyses demonstrate that a focus on adolescent NEETs (or in interventions effectiveness) is increasing. These developments will certainly lead to a greater contribution from specific fields (such as psychology) in order to address issues like mental health. More importantly, these

new trends may create the necessary push for a much-required multidisciplinary approach to NEETs' complex needs, based on meta-theoretical approaches, something which remains absent in the literature. Furthermore, these trends might pave the way for research efforts that are more clearly centered on younger rural NEETs, from both preventive and remedial perspectives. Niche themes such as engagement or emerging themes (as those being associated with risks due to gender disparities) might also be relevant to inform rural NEETs typologies.

Our findings must be interpreted with caution. In terms of coverage, our selection criteria did not include other data sources (e.g., Google Scholar) nor documents in other languages. While focusing on the most impactful research, our efforts can be further expanded by including other databases, gray literature, and additional search terms such as "at-risk youth," which may marginally cover NEETs. In terms of quality, bibliometric reviews are influenced by citation counts. Still, high impact journals as the ones included in the Web of Science are expected to implement a stronger screening of the papers' quality. Additional review approaches (e.g., systematic reviews) can further describe the quality of each paper in this field of inquiry. Finally, in terms of representativeness, we are aware that some disciplines (e.g., sociology) are more attuned with the NEETs situation. While this is true, we intended to show this unbalance, so that our results encourage additional research efforts in other fields (e.g., psychology).

In conclusion, our results justify scientific efforts such as: channeling (inter)national funding for research activities on rural NEETs; integrating the topic in international research networks and projects which promote cooperation between less and more deprived countries; or, creating specific outlets for disseminating reports about rural NEETs (e.g., the publication of special issues in journals examining rurality and youth). Overall, our work also inspires and justifies contextualized, place-based research about younger rural generations, ultimately contributing to boost rural communities in many parts of the globe.

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References

- 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. <https://doi.org/10.1002/jcop.22356>
- Anton, C. E., & Lawrence, C. (2014). Home is where the heart is: The effect of place of residence on place attachment and community participation. *Journal of Environmental Psychology*, 40, 451–461. <https://doi.org/10.1016/j.jenvp.2014.10.007>
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11, 959–975. <http://doi.org/10.1016/j.joi.2017.08.007>
- Arnett, J. J., Kloep, M., Hendry, L. B., & Tanner, J. L. (2011). *Debating emerging adulthood*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199757176.001.0001>
- Bæck, U.-D. K. (2016). Rural location and academic success: Remarks on research, contextualisation and methodology. *Scandinavian Journal of Educational Research*, 60(4), 435–448. <https://doi.org/10.1080/00313831.2015.1024163>
- 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. <https://doi.org/10.1080/1354571X.2017.1409501>
- 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. <https://doi.org/10.1006/jvbe.2001.1868>
- Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, 44(6), 945–963. <https://doi.org/10.1080/1369183X.2017.1384146>
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: A practical application to the Fuzzy Sets Theory field. *Journal of Informetrics*, 5(1), 146–166. <https://doi.org/10.1016/j.joi.2010.10.002>
- Corbett, M. (2007). All kinds of potential: Women and out-migration in an Atlantic Canadian coastal community. *Journal of Rural Studies*, 23(4), 430–442. <https://doi.org/10.1016/j.jrurstud.2006.12.001>
- European Commission. (2018a). *Effective outreach to NEETs: Experience from the ground*. <https://op.europa.eu/en/publication-detail/-/publication/ce7e7e0d-c5ec-11e8-9424-01aa75ed71a1/language-en>
- European Commission. (2018b). *European Council Resolution of the European Youth Strategy 2019-2027*. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2018:456:FULL&from=EN>

- Eurostat. (2020). *Early leavers from education and training*. Author. https://ec.europa.eu/eurostat/statistics-explained/index.php/Early_leavers_from_education_and_training#Overview
- Farrugia, D. (2016). The mobility imperative for rural youth: The structural, symbolic and non-representational dimensions of rural youth mobilities. *Journal of Youth Studies*, 19(6), 836–851. <https://doi.org/10.1080/13676261.2015.1112886>
- Furlong, A. (2006). Not a very NEET solution: Representing problematic labour market transitions among early school-leavers. *Work, Employment and Society*, 20(3), 553–569. <https://doi.org/10.1177/0950017006067001>
- International Labour Organization. (2020). *Global employment trends for youth 2020*. https://www.ilo.org/wcmsp5/groups/public/-dgreports/-dcomm/-publ/documents/publication/wcms_737648.pdf
- Leibert, T. (2016). She leaves, he stays? Sex-selective migration in rural East Germany. *Journal of Rural Studies*, 43, 267–279. <https://doi.org/10.1016/j.jrurstud.2015.06.004>
- MacDonald, R. (2011). Youth transitions, unemployment and underemployment. *Journal of Sociology*, 47(4, SI), 427–444. <https://doi.org/10.1177/1440783311420794>
- Mascherini, M. (2019). Origins and future of the concept of NEETs in the European policy agenda. In J. O'Reilly, J. Leschke, R. Ortlieb, M. Seeleib-Kaiser, & P. Villa (Eds.) *Comparing youth transitions in Europe: Joblessness, insecurity, and inequality* (pp. 503–529). Oxford Press.
- Maunaye, E. (2014). La migration des jeunes: Quelles mobilités? Quels ancrages? La place des liens familiaux et des relations intergénérationnelles. *Enfances, Familles, Générations*, 19, 1–16. <https://doi.org/10.7202/1023767ar>
- Miller, J., McAuliffe, L., Riaz, N., & Deuchar, R. (2015). Exploring youths' perceptions of the hidden practice of youth work in increasing social capital with young people considered NEET in Scotland. *Journal of Youth Studies*, 18(4), 468–484. <https://doi.org/10.1080/13676261.2015.1016352>
- Pedersen, H. D. (2018). Is out of sight out of mind? Place attachment among rural youth out-migrants. *Sociologia Ruralis*, 58(3), 684–704. <https://doi.org/10.1111/soru.12214>
- Petrescu, C., Erdoğan, E., & Flynn, P. (2020). *Manual for the classification of intervention best-practices with rural NEETs*. Rural NEET Youth Network. <https://rnyobservatory.eu/web/Publications/ManualBest-PracticesNEETs.pdf>; <https://doi.org/10.1584/CISRNYN.MN1.2020.12>
- Reagan, E. M., Hambacher, E., Schram, T., McCurdy, K., Lord, D., Higginbotham, T., & Fornauf, B. (2019). Place matters: Review of the literature on rural teacher education. *Teaching and Teacher Education*, 80, 83–93. <https://doi.org/10.1016/j.tate.2018.12.005>
- Roberts, S. (2011). Beyond 'NEET' and 'tidy' pathways: Considering the 'missing middle' of youth transition studies. *Journal of Youth Studies*, 14(1), 21–39. <https://doi.org/10.1080/13676261.2010.489604>
- 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. <https://doi.org/10.1177/0020872813515010>
- Shore, J., & Tosun, J. (2019). Assessing youth labour market services: Young people's perceptions and evaluations of service delivery in Germany. *Public Policy and Administration*, 34(1), 22–41. <https://doi.org/10.1177/0952076717722192>
- Simões, F. (2018). How to involve rural NEET youths in agriculture? Highlights of an untold story. *Community Development*, 49(5), 556–573. <https://doi.org/10.1080/15575330.2018.1531899>
- Simões, F., & Brito do Rio, N. (2020). How to increase rural NEETs professional involvement in agriculture? The roles of youth representations and vocational training packages improvement. *Journal of Rural Studies*, 75, 9–19. <https://doi.org/10.1016/j.jrurstud.2020.02.007>
- Simões, F., Ferreira, T., & Vieira, M. M. (2020). *Rural NEETs in Portugal: 2009-2019 overview*. Rural NEET Youth Network. <https://rnyobservatory.eu/web/National-Reports/NR-PORTUGAL-09-19.pdf>; <https://doi.org/10.15847/CISRNYN.NRPT.2020.12>
- Simões, F., Meneses, A., Luis, 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. <https://doi.org/10.1080/13676261.2017.1311403>
- Tomczyk, Ł., Vanek, B., Pavlov, I., Karikova, S., Biresova, B., & Kryston, M. (2018). Critical thinking, problem-solving strategies and individual development assessment among NEETs – research conducted in Slovakia, Poland and Estonia. *International Journal of Lifelong Education*, 37(6), 701–718. <https://doi.org/10.1080/02601370.2018.1550446>
- UNDESA. (2013). *Definition of the youth*. <https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>
- Walther, A. (2006). Regimes of youth transitions: Choice, flexibility and security in young people's experiences across different European contexts. *Young*, 14(2), 119–139. <https://doi.org/10.1177/1103308806062737>
- Wilkinson, A., Pettifor, A., Rosenberg, M., Halpern, C. T., Thirumurthy, H., Collinson, M. A., & Kahn, K. (2017). The employment environment for youth in rural South Africa: A mixed-methods study. *Development Southern Africa*, 34(1), 17–32. <https://doi.org/10.1080/0376835X.2016.1259986>
- Zarrett, N., & Eccles, J. (2006). The passage to adulthood: Challenges of late adolescence. *New Directions for Youth Development*, 2006(111), 13–28. <https://doi.org/10.1002/yyd.179>
- Zilite, S. (2020). *Research on patterns among youth in a NEET situation*. https://www.salto-youth.net/downloads/toolbox_tool_download-file-2414/Research_long_version.pdf
- Zipin, L., Sellar, S., Brennan, M., & Gale, T. (2015). Educating for futures in marginalized regions: A sociological framework for rethinking and researching aspirations. *Educational Philosophy and Theory*, 47(3), 227–246. <https://doi.org/10.1080/00131857.2013.839376>

Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>

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