#### **ORIGINAL RESEARCH**



# Unveiling the Complexity of Italian NEET Status through Latent Class Analysis: Examining NEET Profiles and their Engagement with Public Employment Services (PES)

Adriano Mauro Ellena<sup>1,2</sup> · Antonella Rocca<sup>3</sup> · Paolo Mazzocchi<sup>3</sup> · Michela Zambelli<sup>1</sup> · Daniela Marzana<sup>1,2</sup> · Federica Pizzolante<sup>3</sup> · Francisco Simões<sup>4</sup> · Giovanni De Luca<sup>3</sup> · Elena Marta<sup>1,2</sup>

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#### Abstract

This study delves into the complex issue of NEET (Not in Employment, Education, or Training) status in Italy, using Latent Class Analysis (LCA) to identify distinct profiles within this heterogeneous group. The research, based on a survey of 970 young Italian NEETs, goes beyond broad categorizations to explore the socio-demographic, economic, and motivational factors that contribute to their situations. Six distinct classes of NEETs were identified, each with unique characteristics, including "Affluent Rural Caregivers in Northern Italy," "Young Educated Unemployed," "Long-Term NEETs in Southern Italy," "Disadvantaged Caregivers in Southern Italy," "Disadvantaged Rural Men in Northern Italy," and "Affluent Discouraged NEETs". The study investigates the relationship of these profiles with Public Employment Services (PES), revealing different motivations for seeking assistance and varied willingness to accept employment conditions such as relocation or temporary work. Significant associations were found between NEET class and the motivation for economic support, willingness to move abroad or within Italy, and acceptance of part-time or temporary work. The findings emphasize the need for tailored interventions that address the specific needs and barriers of each NEET subgroup, rather than a one-sizefits-all approach. The research highlights the complex interplay of geographic, economic, educational, and gender factors in shaping NEET status in Italy.

**Keywords** NEET (Not in education, employment either training) · Public employment services · Policies · Latent class analysis



Adriano Mauro Ellena adrianomauro.ellena@unicatt.it

Department of Psychology, Università Cattolica del Sacro Cuore, Milan, Italy

<sup>&</sup>lt;sup>2</sup> CERISVICO (Research Centre on Community Development and Organisational Quality of Life), Università Cattolica del Sacro Cuore, Brescia, Italy

Department of Business and Quantitative Studies, Università degli Studi di Napoli Parthenope, Naples, Italy

Instituto Universitario de Lisboa (Iscte), Cis-Iscte, Lisbon, Portugal

## 1 Introduction

The school-to-work transition is a challenging phase in a person's life cycle (Quintini et al., 2007; Pastore et al., 2021; Zambelli et al., 2024; Zambelli et al., 2023). Research has shown that, in Italy, this period is one of the longest in comparison to other EU countries due to an education system that is not connected to the labor market and is therefore unprepared to provide students with the skills needed to enter it, as well as to a particularly difficult work context with precarious contracts and unpaid internships (Marzana et al., 2024). These difficulties have resulted in Italy having the highest proportion of young people who are not in employment, education, or training (NEETs) (Ellena et al., 2023): in 2021, 23.1% of young people aged between 15 and 29 in Italy were NEETs. The UN 2030 Agenda for Sustainable Development has included the reduction of NEETs as one of its goals (specifically #8). To achieve this objective, it is essential to address the underlying causes of NEET status. The literature has highlighted several factors that may characterize this youth condition in Italy (Marzana et al., 2024). These can be family factors such as low parental qualifications (Quintano et al., 2018), perceived support and autonomy; educational factors such as dropping out of school (De Luca et al., 2020) and low educational qualifications; territorial factors such as living in southern regions rather than in inland areas or on the city suburbs (Caroleo et al., 2020, 2021; Simoes et al., 2017); and psychological factors such as lower levels of mental wellbeing, low life satisfaction, lower sense of self-efficacy, low civic and political participation as well as reduced soft skills (Alfieri, 2015a, 2015b; Ellena et al., 2021a). However, much has been debated on how far the NEET category explains the phenomenon. Several authors have pointed out that one of the main problems in designing programs for these young people and engaging them is the diversity of situations within this category (Petrescu et al., 2021) but few studies till now have been able to identify these different cases.

This paper aims to address this gap by presenting an exploratory latent class analysis (LCA) of a national sample of 970 Italian NEETs, using original data collected through a tailored survey. The analysis incorporates psychological and behavioral variables—such as motivations for engaging with Public Employment Services (PES) and willingness to accept employment under specific conditions—and adopts a person-centered statistical approach to identify latent NEET profiles shaped by a wide range of structural and personal factors. While the exploratory nature of LCA does not require formal hypotheses, the literature suggests theoretically grounded expectations regarding the configuration of potential subgroups. First, consistent with studies on regional labor disparities (Caroleo et al., 2020; Ellena et al., 2023), we expect to identify one or more classes of NEETs concentrated in Southern Italy, characterized by structural disadvantage and long-term labor market disengagement, often accompanied by lower levels of education and economic hardship. Second, given the gendered dimension of caregiving and labor market participation (Alfieri et al., 2015a; Ellena et al., 2021a), we anticipate the emergence of a predominantly female cluster marked by caregiving responsibilities and limited availability for full-time or mobile employment. Third, drawing on recent research on educational mismatch and labor market frustration (Simoes et al., 2017; ActionAid, 2022), we expect to find a class of highly edu-

<sup>&</sup>lt;sup>1</sup> In 2022, for the first time since 2015, Italy was surpassed by Romania, when considering for the NEET rate the age class 15–29 (19.8 Romania and 19.0 Italy). However, extending the age class for the NEETs until 34 years, Italy remains the country with the highest share (20.8 against 20.3 for Romania).



cated NEETs discouraged from active job searching due to the scarcity of suitable opportunities. Finally, we hypothesize that these profiles will differ in their patterns of engagement with PES: the most structurally vulnerable NEETs may turn to PES primarily for financial aid, whereas more resourceful individuals may seek guidance or training pathways. These expectations guide the interpretation of the latent classes and their associations with motivational and contextual factors, offering a basis for comparison with existing evidence and informing policy implications.

The paper is structured as follows: we first review the conceptual framework and existing literature on NEET categorization and institutional engagement; we then present the methodological approach, detailing the construction of variables and the analytical strategy. The results section outlines the six NEET profiles identified, followed by an examination of how these profiles differ in terms of motivations for accessing PES and employment flexibility. We conclude by discussing the theoretical and policy implications of our findings, suggesting avenues for more targeted and effective support strategies.

## 2 International Perspective on NEETs and Policy Responses

The phenomenon of youth Not in Education, Employment, or Training (NEET) has become an increasingly significant concern in Europe and globally, impacting socio-economic development and individual well-being. NEET status reflects a complex interplay of sociodemographic and economic factors that vary significantly across countries. In Europe, studies have categorized NEET individuals into two main subgroups: Employment Inactive (EI) and Unemployment Experienced (UE) NEETs, distinguishing their economic involvement and social dynamics based on extensive socioeconomic data analysis (Stewart et al., 2017). This distinction reveals varying demographic profiles and health behaviors between the two groups. For instance, countries in the Mediterranean, such as Italy and Greece, exhibit particularly high NEET rates, predominantly reflecting unemployment rather than economic inactivity (Rocca et al., 2021). Macro-economic indicators also play a critical role in the prevalence of NEET youth. A longitudinal analysis spanning from 1997 to 2020 establishes a significant negative association between Gross Domestic Product (GDP) and NEET rates in both European and non-European contexts, underscoring the importance of economic stability and social expenditure in combating NEET status (Amendola, 2022). Conversely, higher levels of social expenditure appear to correlate positively with increased NEET rates, suggesting that while welfare provisions are essential, they must be strategically targeted to mitigate youth disengagement effectively (Amendola, 2022). The impact of institutional frameworks and policy responses on NEET populations has been widely discussed. Assmann and Broschinski emphasize that NEETs have often been viewed as a homogeneous group, thereby oversimplifying the institutional variables that influence youth disengagement across different countries (Assmann & Broschinski, 2021). This perspective is corroborated by other studies indicating the necessity of tailored welfare policies that reflect local realities, particularly in countries like Greece, where NEET categorization has been notably underexplored (Kyridis et al., 2015). Policy interventions have primarily focused on educational transitions and active labor market measures to enhance employability, with mixed results on their effectiveness in reducing NEET rates (Mauro & Mitra, 2015; Malo et al., 2021). In terms of intervention effectiveness, the systematic review by Mawn



et al. (2017) synthesizes evidence from 18 trials worldwide. While intensive, multi-component programs—such as vocational training combined with counseling—showed modest improvements in employment, the overall evidence base remains limited, highlighting persistent gaps in rigorous evaluation even in high-income settings. Expanding beyond Europe, Alfani et al. (2020) employ a synthetic panel technique to explore persistent NEET patterns in Morocco, demonstrating how early NEET status increases the likelihood of repeated disengagement over time—a phenomenon referred to as "Once NEET, Always NEET." This underscores the enduring scarring effects of youth disengagement also in non-Western contexts. Similarly, Jianu (2020) documents a strong positive correlation between NEET rates and poverty levels across EU member states, reinforcing the structural linkage between youth inactivity and economic vulnerability. Furthermore, demographic analyses reveal that specific characteristics significantly affect NEET status. Research undertaken in Turkey confirms that age, gender, marital status, and regional disparities critically influence NEET dynamics (Özdemir et al., 2023). In Southern European countries, gender roles and family responsibilities are particularly prominent in determining NEET prevalence, necessitating an understanding of local cultural contexts when developing intervention strategies (Malo et al., 2021; Marzana et al., 2024). Psychological factors and socioeconomic backgrounds, such as low parental education levels and socioeconomic hardships, significantly contribute to NEET conditions, indicating a need for comprehensive policy formulations that address these root causes (Yiğit et al., 2023; Gutiérrez–García et al., 2018). Interestingly, the transition to adulthood issues reflect broader societal health repercussions. The NEET condition is linked to adverse outcomes such as mental health challenges and diminished social integration, highlighting the importance of targeted support services to assist these youths (Dias & Vasconcelos, 2020; Mitrou et al., 2019). The relationship between NEET status and overall Human Development Index (HDI) supports the assertion that economic inactivity among youth can hinder personal and societal progress, confirming the need for holistic approaches to tackle these issues (Stea et al., 2019). In conclusion, the NEET phenomenon represents a multifaceted challenge requiring a nuanced understanding of its causes and implications. Existing research highlights the necessity for differentiated NEET categorization, targeted policies reflecting local contexts, and a dual focus on economic and psychological support systems. Addressing these issues effectively not only promises to enhance youth engagement in productive activities but also contributes significantly to broader socio-economic stability in Europe and beyond.

# 3 The NEET Category

The category of NEET represents a multifaceted and complex issue. The term itself is often a broad catch-all concept that fails to capture the diverse nature of the circumstances that fall within this category. There exists a wide array of underlying causes, motivations, and barriers that drive individuals into this state, ranging from mental health issues, economic factors, educational gaps, family background, to personal choices. This heterogeneity manifests itself in varying degrees of employability, aspirations, needs, and the readiness of the individuals to engage with interventions. Therefore, constructing effective interventions that are finely targeted becomes an inherently challenging task. Tailoring interventions necessitates a deep and nuanced understanding of the subgroups within the NEET population,



which may be defined by geography, age, gender, ethnicity, disability, or other factors. Standardized or broad-brush policies can often miss the mark, leading to ineffective or even counterproductive outcomes (Ellena et al., 2024). Hence, an appreciation of different factors that create the NEET phenomenon, coupled with a flexible and targeted approach to policy and intervention, is crucial for addressing this societal challenge in a meaningful way. In recent years, the NEET category has become a focal point for many authors aiming to dissect and understand its complexities. Efforts have been made to go beyond a monolithic description, providing categorizations and clusters that could offer a more nuanced comprehension of the diverse individuals within this group. Among these attempts, the classification by Mascherini and Ledermaier (2016) has been widely adopted, where NEETs were categorized by analyzing survey responses about employment status, job search activity, and reasons for inactivity. Key questions focused on labor market participation, unemployment duration, and personal circumstances, such as caregiving or discouragement. This led to the identification of seven main categories described as follows: (a) Re-entrants: Young people planning to re-enter work, education, or training, having recently been employed or enrolled. They will resume building human capital; (b) Short-term unemployed: Individuals unemployed for less than a year, possibly transitioning from school to work. Their level of vulnerability is considered moderate; (c) Long-term unemployed: Young people unemployed for over a year, facing high risks of social exclusion due to limited job opportunities, potentially causing lifelong damage; (d) Unavailable due to illness or disability: Individuals not seeking or unable to start work in the near term due to health conditions or disabilities; (e) Unavailable due to family responsibilities; Young people not seeking work due to caregiving for children or dependent adults. This group's vulnerability varies; (f) Discouraged inactive: Young people who have ceased job searching, believing no opportunities exist. They are typically highly vulnerable and at risk of lifelong employment issues; (g) Other inactive: A residual category encompassing NEETs not fitting the previous categories. This group is highly diverse, ranging from the most vulnerable to those waiting for specific opportunities or following alternative paths.

Adding to the complexity and acknowledging the unique aspects of the Italian context, Ellena and colleagues (2021b) recently introduced an additional category, the Very longterm unemployed, referring to those who have been seeking employment for more than three years. This addition is particularly pertinent in Italy, reflecting a situation that has significant resonance within the country and that further emphasizes the multifaceted nature of the NEET phenomenon. In a study conducted in 2023, Ellena and colleagues endeavored to delve into the NEET categories, describing them based on sociodemographic characteristics, psychological attributes, and soft skills. The comprehensive result demonstrated that there are generally structural differences across Italy, encompassing not only the North-South divide but also the urban-rural contrast. Concurrently, gender emerged as a significant variable once again. Especially among Italian young people, indeed, the unemployment rates are systematically higher among women and even the propensity to the inactivity is higher among them. Differences in satisfaction and psychological well-being were mainly observed between inactive individuals and job-seekers, with the latter presenting lower values. In contrast, inactive individuals were found to have overall lower levels of soft skills, although these were low across all subcategories when compared to those who are not classified as NEET (Ellena et al., 2021a). The study emphasizes the complexity and heterogene-



ity within the NEET category and underscores the need for nuanced interventions that take into account these diverse and interconnected factors.

In 2022, ActionAid (an international NGO that works to fight poverty, promote human rights, and support social justice worldwide) delved into the NEET category in Italy, identifying four major clusters that summarize the NEET condition in 2020: (a) Young School Dropouts (15-19 years): Lacking work experience and inactive, with only middle-school education, and living in family units with children. This residual yet significant group is spread across Italy; (b) Youth Seeking First Employment (20-24 years): No prior work experience and seeking a first job, primarily residing in the Southern regions with high school diplomas. This cluster, the largest, highlights the fragile job market in the South, where youths struggle to enter employment. The effect of widespread undeclared work in these areas would be worth further investigation; (c) Formerly Employed Seeking New Work (25-29 years): Mainly male, with higher education, from single households, and receiving unemployment benefits. Mostly located in central Italy; (d) Discouraged Individuals (30–34 years): With prior work experience but now inactive, primarily residing in northern, non-metropolitan areas. Influenced by factors like gender (mainly female), family structure (couples without children), and low education levels. The presence of foreign citizenship also correlates with a significant quota of NEET foreigners in Northern Italy. The data from Actionaid reveal structural inequalities affecting the NEET condition and the profound, complex suffering of a whole generation. The diverse needs and targets emphasize the necessity to create sustainable, long-term, multi-measure integrated pathways that grasp the intersectional needs of new generations, particularly if aiming to impact the most vulnerable youth populations. These pathways must appropriately combine skills enhancement and education with job placement and support.

In 2020, ANPAL (Agenzia Nazionale per le Politiche Attive del Lavoro), in collaboration with the Italian Public Employment Services (PES), carried out a comprehensive analysis involving 12,989 users across 15 Italian regions through the administration of the Scheda di Orientamento di base, a qualitative profiling questionnaire. The sample, with a notable concentration in regions such as Piemonte, Liguria, Lazio, Calabria, and Molise, was composed primarily of recipients of the Citizenship Income (Reddito di Cittadinanza), with a slight majority of women (52.2%) and a high proportion of individuals over the age of 45 (47.9%). Most participants had low educational attainment, with over half having completed only lower secondary school. The data were collected through structured interviews and captured a wide range of information, including previous engagement with employment centers, job search behaviors, perceived barriers and difficulties, personal resources, expectations, strategies adopted, actions taken, and channels used to find employment. The aim of the profiling service was to assess each user's transitional situation, determine the type of support needed, and guide the implementation of suitable active labor policy measures. A specific analysis also focused on understanding users' expectations, preferred job types, and obstacles encountered in the job search process. Based on these data, a multivariate cluster analysis was conducted, resulting in the identification of five distinct user profiles, each defined by specific socio-demographic characteristics, levels of motivation, perceived employability, and approaches to job searching. This analysis identified five types of users with distinct sociodemographic characteristics and attitudes toward job-seeking: (a) Cluster One (42.6% of users): These users have previously sought help from Employment Centers mainly for administrative tasks, and only 12% for job orientation. Most are males over 45,



with low or medium-low employability, and about 60% reside in the Southern regions. They have clear ideas about the type of job they seek but face difficulties in finding adequate offers in terms of pay or contract, resulting in distrust and demotivation; (b) Cluster Two (18.2% of users): This cluster is strongly characterized by "uncertain" workers, with most of them turning to Employment Centers for administrative issues and only 16% for orientation. Mostly women over 45, they exhibit indecision regarding the field in which they want to find employment and have a low level of education and employability; (c) Cluster Three (17.8% of users): Almost half of these users have followed a path of orientation/job search assistance. Predominantly women over 34 from the North-West regions, they have medium and medium-high employability and are very active in their job search but face difficulties in the way they present themselves and age-related issues; (d) Cluster Four (11.2% of users): Mostly younger users, up to 34 years, with medium-high education and employability. They seek information to enhance their skills and are highly active in job searching, willing to move anywhere in Italy or abroad. This cluster is strongly characterized by workers actively looking to improve or update their professional skills; (e) Cluster Five (10.1% of users): These users have never previously turned to an Employment Center and have never followed an orientation path. They are aware of their difficulties in job searching, including not knowing how to direct or propose their job search, and thus seek orientation for a better understanding of their professional abilities. In summary, the study conducted by ANPAL in collaboration with PES highlights various user profiles with different needs, expectations, and challenges in their job-seeking efforts. The detailed clustering analysis provides valuable insights into different attitudes and behaviors towards job-seeking, revealing specific areas of focus to tailor support and interventions for various segments of job seekers in Italy. The findings emphasize the need for targeted support measures to address the diverse needs and challenges faced by different user groups in their quest for employment. Despite the enormous contribution that this clustering has brought to the activities of PES, it is interesting to note how it has scarcely considered not only NEETs, but also youth in general. The sample exhibits particular characteristics. When describing the features of the users, it is necessary to bear in mind that in almost 90% of cases, these are individuals affected by the Citizenship Income Measure. Consequently, this refers to users already distinguished by certain unique traits relating to their socio-economic situation, connected to receiving financial support aimed at individuals and families with an income below the poverty threshold.

It is within this framework that the present study is situated, aiming to contribute to the evolving literature on NEET youth by focusing on a national sample of Italian individuals Not in Education, Employment, or Training. Building upon prior research that has emphasized the multifaceted and heterogeneous nature of NEET status, this work integrates a wide range of variables—both structural and psychological—with a specific emphasis on expectations toward PES and young people's aspirations for their future.

The contribution of this study is twofold. First, it draws inspiration from existing findings that have highlighted the influence of socio-demographic conditions, regional disparities, and psychological vulnerabilities on NEET status. However, it introduces a distinctive perspective by placing expectations and perceptions regarding PES at the center of the analysis—an element often overlooked in large-scale studies. Second, the sample is composed exclusively of Italian NEET youth. This focus is particularly relevant given that Italy consistently records the highest NEET rates among EU member states, with deep territo-



rial inequalities—between North and South, and urban and rural areas—shaping the lived experience of disengagement.

Taken together, the broader literature outlines three critical insights: (1) the heterogeneity of NEET populations requires nuanced, person-centered approaches capable of identifying latent subgroups with distinct needs; (2) generalist, "one-size-fits-all" interventions have shown limited effectiveness, partly due to insufficient program evaluation and contextualization; (3) the NEET condition carries long-term consequences, such as economic and psychological scarring, which deepen youth marginalization over time.

This study responds to these gaps by adopting a LCA approach to uncover distinct NEET profiles within the Italian context. It does so by combining structural and psychosocial determinants—such as employment history, educational attainment, regional background, mental well-being, and future expectations. Furthermore, it investigates how these latent profiles differ in terms of engagement with PES and job-search attitudes, thereby providing a grounded understanding of how statistical typologies may inform targeted and effective policy interventions. By focusing on both measurable vulnerabilities and subjective outlooks, this research offers an integrative and context-sensitive perspective on NEET youth in Italy, enhancing the analytical tools available to both scholars and policymakers concerned with youth exclusion and labor market integration.

#### 4 The Present Research

The aim of this exploratory study is to deepen understanding of the diversity within the Italian NEET population by identifying distinct classes based on structural socio-demographic variables (e.g., place of residence, level of education) and personal circumstances (such as being inactive due to family responsibilities or health problems). A particular innovation of this study lies in the unique sample of NEETs, a population that is typically challenging to reach, and in the use of variables that measure their relationship with Public Employment Services (PES). After identifying these NEET classes, the study further details each profile in terms of motivations for approaching PES and the conditions they are prepared to accept to secure employment. This approach offers a comprehensive and nuanced portrait of the NEET population, highlighting the diversity and complexity within this group and informing more targeted interventions and policy decisions. The analysis relies on data from a specialized survey involving 970 young NEETs interviewed between November 2022 and September 2023. Conducted as part of an EEA Grant project, the survey aimed to evaluate the effectiveness of PES in enhancing youth employability, with a particular focus on rural areas.

# 5 Methodology

The dataset used in this study comes from an ad hoc survey realized within the activities of the EEA Grant project "Tr@ck-IN, Public Employment Services tracking effectiveness to support rural NEETs", started in 2021. The survey was conducted in the period from November 2022 to September 2023. The questionnaire administration was based on the cooperation with the Public Employment Services and the snowball technique and social



networks, in particular Facebook and Instagram, with the help even of some important influencers. Snowball technique is particularly useful for finding and recruiting hard-to-reach participants, such as NEETs. The questionnaire was administrated through CAWI technique using Qualtrics software. Even if it is not a statistically representative sample, it can shed light on different types of NEETs and their relationship with PES, in particular with their expectations with respect to PES. In total, we collected data from 970 NEETs (see Table 3 for total sample description). Therefore, it shows a good coverage in terms of regional areas, gender, age class, and motivations for being in the NEET status, as described in the next section (see Table 3). Again, the scope of this research is not to analyze the whole population of the Italian NEETs, but only to get insights into the different existing types of NEETs, in their relationship with PES, with the scope to identify the best tailored actions to promote their effective entrance into the labour market.

#### 5.1 Instruments

This study used a range of structural, motivational, and conditional variables to examine the NEET population in Italy. Here is a precise explanation of how each variable was constructed, indicating which were converted into dummy variables, which were aggregated, and how they were transformed from the original dataset.

#### 5.1.1 Structural Variables

- 1. *Gender*: Gender was originally coded as binary (1=female, 0=male) and retained in this format, which is directly usable in the analysis without further transformation.
- 2. Age: Age, collected as a continuous variable, was categorized into four age groups (<25, 25–27, 28–29, >29 years) for analysis. Each age group was kept as a categorical variable, allowing the analysis to observe NEET characteristics across these age bands without converting them into dummies.
- 3. Geographic Area: The original dataset recorded geographic areas by NUTS1 classification. For the analysis, geographic area was aggregated and transformed into a binary dummy variable with two categories: (a) North (comprising North-West, North-East, and Center); (b) South (including South and Isles). This simplification created a regional comparison (North=1, South=0) to facilitate insights into geographic disparities within the NEET population.
- 4. *Degree of Urbanization*: This variable was initially recorded on a three-level scale (city, town, rural). For the analysis, "town" and "rural" were combined to create a binary variable (1=rural, 0=urban) to simplify the contrast between urban and rural areas.
- 5. *Migration Status*: Migration status was coded as a binary variable in the original dataset (1=migrant, if born outside Italy, 0=non-migrant) and was used directly in this format without further modifications.
- 6. Education Levels: Education levels were grouped according to ISCED standards into three categories: low (ISCED 0–2), medium (ISCED 3–4), and high (ISCED 5–8). This variable was kept as a categorical variable rather than transformed into separate dummies, allowing for an analysis across broad educational groups. Parental education



levels were coded as binary variables indicating whether each parent had a high education level (1) or low/medium level (0).

- 7. Economic Condition: Economic condition was derived by combining responses to several items regarding financial security, such as affordability of expenses. A binary variable, Economic condition was created, where 1 indicates participants in "bad" economic conditions (i.e., experiencing financial hardship) and 0 indicates others. This variable was used to represent economic disadvantage within the NEET population.
- 8. The NEET typology was created to categorize participants based on their employment status and reasons for not engaging in the labor market. This classification, aligned with Eurofound's approach (Mascherini & Ledermeier, 2016), simplifies the NEET population into five main categories, capturing distinct profiles based on their willingness to work and personal circumstances: (a) Long-term Unemployed: This category includes participants who reported being unemployed for more than 12 months or who had never worked since completing their education. These individuals indicated that they were currently looking for work but faced long-term detachment from the labor market. Classification was based on responses to questions about the duration of unemployment and prior work experience. (b) Short-term Unemployed: This group includes those who had been unemployed for 12 months or less and were actively seeking employment. Shortterm unemployed participants had either recent job experience or recently completed their education. They were identified by responses indicating unemployment duration of 12 months or less. (c) Caregiver: Participants were categorized as caregivers if they were unwilling to start a job due to caregiving responsibilities. When asked about their willingness to work, these individuals responded "no" due to caregiving obligations (e.g., responsibilities for children or dependent family members), which was recorded as their main activity. (d) Discouraged: This category comprises individuals who reported a lack of job opportunities as the reason they were not actively seeking employment. When asked about their willingness to begin work, they responded "no" due to discouragement related to limited job availability or perceived mismatch with their qualifications. This discouraged status reflects perceived barriers that hinder their job search motivation. (e) Health Limitations: Individuals with health issues preventing them from seeking or starting employment were classified in this category. They responded "no" to willingness to work due to health problems, which acted as a barrier to job entry. These five NEET types were retained as categorical variables rather than being transformed into separate dummies, allowing the analysis to differentiate between these specific NEET subtypes.

## 5.1.2 Motivations for Approaching PES

Motivational variables were used to capture participants' reasons for engaging with Public Employment Services (PES). To operationalize this construct, two scales were administered to assess the factors influencing PES registration. The first scale evaluated the importance of various motivations that guided participants' decisions to register with PES, using a 5-point Likert scale ranging from 1 ("not important at all") to 5 ("very important"). This scale covered a range of potential motivations, including financial assistance (e.g., "To benefit from subsidies"), job search support (e.g., "To receive support in job search"), training guidance (e.g., "To obtain advice on training courses or other initiatives"), and access to general



information (e.g., "To access other useful information"). The second scale examined the specific types of support or services that might encourage individuals to register with PES, allowing for multiple responses. While the first scale was used for people registered to PES, the second one was addressed to those who were not registered to PES at the time of the interview, to understand the reasons which could lead them to register. This scale included options reflecting various types of support, such as instrumental, emotional, informational. Additional items captured participants' interest in receiving advice on skills improvement (e.g., recommendations for enhancing job-related skills) and support in responding to job offers. Based on responses to these two scales, four dummy variables were constructed to capture the primary motivations for PES registration: economic support, job search assistance, training information, and general information access. Each dummy variable represents a specific motivation, providing a structured framework for analyzing engagement factors within the NEET population. These variables are detailed below.

- 1. Economic Support: This variable was created to represent whether participants sought PES assistance for financial reasons, encompassing both subsidies and incentives. The construction criteria were as follows: a) Participants were coded as 1 for Economic Support if they indicated seeking "economic incentives" or if they rated their need for "subsidies" higher than 2 on a 5-point scale. b) This binary variable thus captured respondents who either required financial incentives or rated their need for subsidies as moderate to high, marking them as financially motivated to register with PES.
- 2. Job Search Support: The variable for job search assistance was coded as 1 if participants indicated interest in "job-related information" or if they rated their need for "help with job search" above 2 on a 5-point scale. This variable thus identifies participants who actively sought PES assistance for job searching or relevant information.
- 3. *Training*: This variable was constructed to reflect participants' motivation for accessing training opportunities through PES. It was coded as 1 if participants expressed a need for "training information" or if they rated their need for "training advice" above 2 on the scale. This coding captured individuals with a clear interest in training support, regardless of whether it was for general information or specific advice.
- 4. Information Access: The variable for information access was created to reflect participants' general need for employment-related advice. It was coded as 1 if participants sought "general advice" or rated their need for "information access" higher than 2. This variable thus included individuals interested in obtaining broader employment information or guidance.

Each of these motivation variables was transformed into a binary (dummy) format, allowing the analysis to explore distinct motivations across NEET subgroups in engaging with PES. These covariates reveal differences in the types of support sought by NEETs, whether financially driven or oriented toward employment, training, or general information.

## 5.1.3 Conditions for Accepting Employment

A scale examining participants' willingness to take specific actions to enhance their chances of finding employment was also administered, offering a range of options that capture flexibility in job search conditions. Participants could select multiple responses, reflecting open-



ness to various adjustments in their employment approach. These options include relocating within Italy or moving abroad to access broader job markets, as well as improving existing skills or acquiring new skills to enhance employability. Additionally, participants could indicate their readiness to accept positions requiring lower education or skill levels than they currently hold, as well as their openness to part-time or temporary work. An openended "other" option allowed participants to specify any further conditions they would consider to secure a job. Based on responses to this scale, key conditions were recoded into binary dummy variables to capture specific employment-related flexibilities. The variable Move Abroad was coded as 1 for participants willing to relocate internationally for work and 0 otherwise, while Move within Italy indicates willingness to relocate domestically (1=willing, 0=unwilling). For job type preferences, Part-Time Job was coded as 1 for participants open to part-time work and 0 for those unwilling, while Temporary Job reflects openness to short-term or contract-based employment (1=willing, 0=unwilling). These dummy variables were essential for analyzing the adaptability and flexibility of NEETs in their job search criteria, providing structured insights into the concessions participants are willing to make to secure employment.

## 6 Data Analyses

LCA (Collins & Lanza, 2010) is a person-oriented psychometric approach that adopts a clustering algorithm to identify meaningful subgroups (i.e., latent classes) of individuals sharing a similar pattern of responses to a set of indicators. In this work, latent class analysis was performed using Mplus 8.8 to identify different groups of NEETs presenting specific characteristics. The following variables were included as indicators of the latent class: gender, age, geographic area, degree of urbanization, migration background, education, father's education, mother's education, economic condition, typology of NEET. To identify the number of groups (i.e., classes) that best described the heterogeneity within the sample, we compared several k-profile models (where k is the number of classes), asking for an incremental number of latent classes (Asparouhov & Muthèn, 2014). Both statistical and theoretical standards should be taken into consideration when making decisions about the optimal number of classes. First, we evaluated models' fit indices (AIC, Bozdogan, 1987; BIC, Schwartz, 1978; adjusted BIC; and AWE, Banfield & Raftery, 1993), where lower values indicate a better k-class solution. We also consulted the adjusted Lo–Mendell–Rubin likelihood ratio test (adjusted LMR-LRT; Lo et al., 2001), where non-significant p-value for a k-class model leads to prefer the more parsimonious k-1 one, and the adjusted Bayes Factor which compares a k model and a k+1 model with a preference for the model with BF>3. Finally, we consulted the level of relative entropy, with values>0.70 indicating a good quality in classification. Finally, in choosing the best model solution we also considered the theoretical interpretability of latent classes (Nylund et al., 2007), that should represent unique configurations of individual characteristics that are coherent with the theoretical literature on NEET. Once the best model was selected, we evaluated the precision in the classification of cases to their classes by examining: the modal class assignment proportion (mcaP) for each class that should be included in the 95% confidence interval of the corresponding class proportion (CP o  $\pi$ ); the average posterior probability (avePP) that should be



>0.70 for each class; and the odds of correct classification (OCC) that is expected to be >5 for each class (Masyn, 2013; Nagin, 2005).

After identifying the best solution for LPA, the factor scores of the categorical latent variable indicating participants' belonginess to different classes was created. This observed variable was investigated in relation to individual variables related to motivations for approaching PES (i.e., economic support, job search support, training, information access) and the conditions for employment (i.e., move abroad, move within the country, part-time job, temporary job), through chi-square tests performed in Jasp software. Standardized (adjusted) residuals were adopted to interpret chi-square test results (Sharpe, 2015), where residuals exceeding  $\pm 1.96$  indicating a significant difference between expected and observed frequencies in that cell ( $\pm 1.96$  indicating a significant difference between expected and

## 7 Results

## 7.1 Latent Class Analysis

LCA was conducted comparing six different measurement models by increasing the number of classes by one unit starting from the two-class solution. We stopped the estimation at the seven-class solution as this model presented convergence issues. Furthermore, as can be observed from the cluster sizes, the solution with 7 classes resulted in excessive fragmentation, leading to the formation of classes representing less than 5% of the sample. As presented in Table 1, both the three-class and the six-class solution were supported by some statistical criteria, however, the six-class solution was the only one presenting a sufficient quality of classification indicated by the level of Entropy, therefore we selected this as the best k-class model solution. As reported in Table 2, the six-class model satisfied the classification diagnostics criteria, thus indicating that the six classes were well differentiated from one another.

The six distinct classes obtained exhibit unique characteristics that reflect diverse sociodemographic profiles and economic conditions of NEETs in the sample. Table 3 reports the item-response probabilities for the six-class model that have been interpreted to name the six profiles. Below, we provide a detailed description of each group, assigning a descriptive label based on their most defining attributes: Class 1: "Affluent Rural Caregivers in Northern Italy" (17%, N=167). This cluster, consisting exclusively of women, is characterized by an overrepresentation of individuals aged 32, predominantly located in Northern Italy's rural areas. Members of this group generally have an intermediate level of education, with no specific distinctions regarding parental educational backgrounds. They are economically well-off, with a clear majority engaged in caregiving roles, while other types of NEETs are minimally represented. Class 2: "Young Educated Unemployed" (11%, N=105). This cluster, with an even gender distribution, predominantly includes individuals aged 26–29. In terms of geographic distribution and urbanization, this profile reflects the overall sample without being concentrated in any specific area. Members of this cluster have high educational levels, as do their parents, and are in good economic standing. A distinctive feature of this cluster is that all members are short-term unemployed NEETs, indicating recent exits from the labour market or active job searches. Class 3: "Long-Term NEETs in Southern Italy" (37%, N=359). The largest cluster primarily comprises young men, though a considerable



Note. LL=model log-likelihood; fp=free parameters; AIC=Akaike Information Criterion; CAIC=Consistent AIC; BIC=Bayesian Information Criterion; AWE=Approximate 24,29,39,106,175,221,376 44,46,105,167,249,359 59,165,173,262,311 Profiles proportion 107,175,277,411 60,186,624 250,720 Entropy 0.650 0.6490.732 0.772 0.653 0.571 Weight of Evidence Criterion; Adj-LMR=Adjusted Lo, Mendell, and Rubin likelihood ratio test; BLRT=bootstrap likelihood ratio test Adj-BF (K, K+1) 1101.58 4974.10 0.22 0.58 Adi-LRM p-value 0.822 1.000 0.799 1.000 0.00 189.128 212.869 63.464 48.498 49.472 51.051 LRT 13548.10 3251.25 3354.89 13441.45 3200.90 3162.71 AWE 12898.01 12912.02 12908.96 12925.98 12899.09 3026.92 Adj-BIC **Table 1** Fit indices for latent class analysis' best model selection 3057.89 3229.73 13300.75 3131.73 13110.8 3178.8 2970.78 2814.03 12784.02 12769.11 12737.13 12725.23 101 84 -6244.613 -6267.563 -6357.015 -6300.555 -6452.387 -6325.011 7-class\* 2-class 3-class 4-class 5-class 6-class Model

\*The best log-likelihood was not replicated thus, the results are not trustworthy

percentage of women are present, with the majority aged 21–25. This group is overrepresented in Southern Italy, with a slight predominance in urban areas over rural ones. Members generally possess intermediate education levels, with families tending toward lower educational backgrounds. Economically disadvantaged, this cluster shows a significant representation of both long-term and short-term unemployed NEETs, reflecting substantial barriers to labor market entry and retention. Class 4: "Disadvantaged Caregivers in Southern Italy" (26%, N = 249). This cluster, composed primarily of women aged 26–29, includes only individuals residing in Southern Italy, with a slight urban predominance. Members of this group have low educational levels and are economically disadvantaged. There is a clear majority engaged in caregiving, with limited representation of other NEET types. This profile reflects the socio-economic vulnerability of the cluster, shaped by both geographic context and caregiving roles. Class 5: "Disadvantaged Rural Men in Northern Italy" (5%, N=44). Composed mainly of men, this cluster has a high representation of individuals aged 21–25, exclusively from Northern Italy, with a significant presence in rural areas. Another defining characteristic is the high rate of migrant status among members, who generally have low education levels and are in very precarious economic situations. The NEET type most represented here is caregiver, alongside a notable presence of individuals facing health issues. This cluster appears to represent socio-economic disadvantage intensified by a rural context and migrant background. Class 6: "Affluent Discouraged NEETs" (5%, N=46). This predominantly female cluster consists largely of individuals aged 28–29, geographically dispersed with a slight presence in rural areas. Members of this cluster have high levels of education, as do their parents, and are in favourable economic conditions. There is a significant overrepresentation of discouraged NEETs, or individuals who have ceased active job searches. This group represents a class of affluent young people who, despite high educational attainment, find themselves inactive due to a lack of motivation.

#### 7.2 Chi-square Tests

A series of chi-square tests were performed to investigate whether the belonginess to specific NEETs conditions was associated with motivations for approaching PES and conditions they are prepared to accept to secure employment.

Regarding the motivations for approaching PES, a significant chi-square test showed an association between the NEET class and the motivation of getting economic support  $[X^2(5)=19.13; p=.002;$  Cramer's V=0.14; N=970]. Specifically, individuals belonging to the groups of "Young Educated Unemployed" (std.residuals=-2.26) and "Affluent Discouraged NEETs" (std.residuals=-2.48) were less likely to enroll to PES for economic support than would be expected by chance. Conversely, those in the "Disadvantaged Caregivers in Southern Italy" group were more likely to access PES for economic support (std.residuals=2.60) than expected. Non-significant associations emerged between NEET classes and the other variables related to motivation to reach PES (i.e., job search support, training, information access).

Regarding the conditions for accepting an employment, a significant chi-square test showed an association between the NEET class and the availability to move from another country to get a job  $[X^2(5)=20.90; p<.001; Cramer's V=0.15; N=970]$ . In this case, individuals from the "Affluent Rural Caregivers in Northern Italy" class (std.residuals= -2.12) and the "Disadvantaged Caregivers in Southern Italy" class (std.residuals= -2.70) were less



Class	N	CP ο π	95% CI	mcaP	avePP	OCC
class 1	167	0.331	(0.196-0.432)	0.370	0.792	7.70
class 2	105	0.267	(0.171 - 0.394)	0.257	0.819	12.42
class 3	359	0.187	(0.132-0.251)	0.172	0.808	18.30
class 4	249	0.112	(0.053 - 0.170)	0.108	0.864	50.37
class 5	44	0.051	(0.025 - 0.086)	0.047	0.749	55.53
class 6	46	0.051	(0.028 - 0.090)	0.045	0.885	143.20

Table 2 Classification diagnostics for the six-class model

Note. CP o  $\pi$ =corresponding class proportion; 95% CI=confidence interval of CP; mcaP=modal class assignment proportion; avePP=average posterior probability; ODD=odds of correct classification

prone to move outside Italy to get a job than would be expected by chance, while individuals in the "Young Educated Unemployed" (std.residuals = 3.05) and the "Long-Term NEETs in Southern Italy" (std.residuals = 2.25) group had higher motivation to move abroad than expected.

A significant association emerged between the NEET class and the availability to move from one region to another within the Italian territory to get a job  $[X^2(5)=69.12; p<.001;$  Cramer's V=0.27; N=970]. Specifically, individuals from the group "Affluent Rural Caregivers in Northern Italy" (std.residuals= -3.42) and "Disadvantaged Caregivers in Southern Italy" (std.residuals= -4.79) were less prone move outside their region than would be expected by chance. Conversely, individuals from the "Young Educated Unemployed" (std. residuals=6.23) and the "Long-Term NEETs in Southern Italy" (std.residuals=3.29) group were more motivated to move to another region to find a job than expected.

A significant association was also revealed between the NEET class and the availability to accept a part-time job  $[X^2(5)=51,17; p<.001; Cramer's V=0.23; N=970]$ . Specifically, individuals from the "Affluent Rural Caregivers in Northern Italy" (std.residuals=4.93), the "Disadvantaged Caregivers in Southern Italy" (std.residuals=2.31) and the "Affluent Discouraged NEETs" (std.residuals=1.99) groups were more prone to accept a part-time job than would be expected by chance, while those belonging to the "Long-Term NEETs in Southern Italy" group (std.residuals=-5.64) showed a lower motivation than expected.

Finally, a significant chi-square test showed an association between the NEET class and the availability to accept a temporary job  $[X^2(5)=39,54; p<.001; Cramer's V=0.20; N=970]$ . In this case, individuals from group "Affluent Rural Caregivers in Northern Italy" (std.residuals=2.60) and "Young Educated Unemployed" (std.residuals=4.68) showed a stronger motivation to accept a temporary job than what would be expected by chance, while individuals from the "Long-Term NEETs in Southern Italy" (std.residuals=-3.92) group were less prone than expected.

## 8 Discussion

This study provides a nuanced examination of the NEET population in Italy, uncovering significant heterogeneity within this group through LCA and offering insights into their varied relationships with PES. Our findings align with the growing body of literature that critiques the NEET category as overly broad and argues for a more segmented approach to understanding and addressing NEET status (Petrescu et al., 2021). By identifying distinct NEET profiles, we provide a basis for designing interventions that respond to the specific needs



Table 3	Item-response	probabilities	for the six-	class LCA

Variable	Total sample	CLASS 1 N=167	CLASS 2 $N=105$	CLASS 3	CLASS 4	CLASS 5	CLASS 6
	N=970(%)	(17%)	(11%)	N=359	N=249	N=44	N=46
Gender			-	(37%)	(26%)	(5%)	(5%)
Male	283(0.292)	0.000	0.280	0.536	0.160	0.549	0.232
Female	687(0.708)	1.000	0.280	0.330	0.100	0.349	0.232
	087(0.708)	1.000	0.720	0.404	0.840	0.431	0.708
Age	161(0.166)	0.072	0.127	0.250	0.144	0.202	0.000
21–25	161(0.166)	0.072	0.137	0.250	0.144	0.302	0.000
26–27	323(0.333)	0.188	0.443	0.390	0.355	0.394	0.073
28–29	357(0.368)	0.242	0.392	0.334	0.435	0.304	0.715
32	129(0.133)	0.498	0.028	0.026	0.066	0.000	0.212
Geographic area							
North	227(0.234)	0.592	0.253	0.087	0.000	1.000	0.285
South	743(0.766)	0.408	0.747	0.913	1.000	0.000	0.715
Degree of Urbanization							
Urban	369(0.380)	0.240	0.386	0.439	0.469	0.151	0.274
Rural	601(0.620)	0.760	0.614	0.561	0.531	0.849	0.726
Migration background							
No	921(0.949)	0.916	0.958	0.993	0.962	0.764	0.890
Yes	49(0.051)	0.084	0.042	0.007	0.038	0.236	0.110
Education <sup>1</sup> (NEET)							
Low (0-2)	279(0.288)	0.078	0.000	0.299	0.509	0.643	0.105
Med (3–4)	535(0.552)	0.726	0.200	0.667	0.477	0.311	0.567
High (5–8)	156(0.161)	0.195	0.800	0.035	0.014	0.046	0.328
Education <sup>1</sup> (Mother)							
Low-med	890(0.918)	0.963	0.733	0.935	0.969	0.976	0.713
High	80(0.082)	0.037	0.267	0.065	0.031	0.024	0.287
Education <sup>1</sup> (Father)	, ,						
Low-med	906(0.936)	0.988	0.783	0.981	0.970	0.894	0.657
High	62(0.064)	0.012	0.217	0.019	0.030	0.106	0.343
Economic condition	, ,						
Good	309(0.319)	0.407	0.450	0.292	0.183	0.082	0.826
Bad	661(0.681)	0.593	0.550	0.708	0.817	0.918	0.174
Typology of NEET	( )				,		
Long-term unemployed	105(0.110)	0.037	0.000	0.202	0.122	0.081	0.000
Short-term unemployed	340(0.357)	0.176	1.000	0.557	0.050	0.256	0.000
Caregiver	366(0.384)	0.729	0.000	0.000	0.726	0.553	0.498
Health problems	35(0.037)	0.034	0.000	0.045	0.024	0.111	0.069
Discouraged	107(0.112)	0.034	0.000	0.045	0.024	0.000	0.433

Note. <sup>1</sup>Based on ISCED=International Standard Classification of Education

and motivations of each subgroup, rather than applying a generalized approach. The emergence of diverse NEET classes, such as the "Long-Term NEETs in Southern Italy" and the "Affluent Discouraged NEETs", underscores the complex interplay between socioeconomic background and labor market disengagement. The "Long-Term NEETs in Southern Italy" are particularly representative of systemic issues in Italy's labor market, where limited economic opportunities and high unemployment rates in southern regions perpetuate NEET



status, as previously highlighted by Caroleo et al. (2021) and De Luca et al. (2020). The fact that this group shows a high willingness to relocate within Italy or abroad reflects not only a readiness to engage in employment but also the structural constraints that make local job opportunities inaccessible. This phenomenon is consistent with research on regional disparities within Italy, which emphasizes how geographic and economic factors contribute to prolonged youth unemployment and NEET rates. Conversely, the "Affluent Discouraged NEETs" represent a profile where disengagement is less about economic need and more about a lack of suitable job opportunities that align with participants' qualifications. This finding echoes previous studies that show how highly educated NEETs can experience frustration and demotivation when faced with job market conditions that do not match their skills, a situation documented by Simoes et al. (2017) in other Southern European contexts. This profile challenges the assumption that NEET status is primarily driven by financial vulnerability, pointing instead to the educational mismatch problem where young adults find themselves overqualified or unable to secure positions that utilize their training. The implication here is that for certain NEETs, policy interventions should go beyond economic support and instead focus on career development and job matching that aligns with their skill levels and aspirations. Gender differences within NEET subgroups, particularly the predominance of women in caregiving roles, reinforce existing literature on the gendered dimensions of NEET status (Ellena et al., 2023). Our findings regarding "Disadvantaged Caregivers in Southern Italy" reveal that caregiving responsibilities remain a significant barrier to employment for women, often compounded by limited access to support services and traditional gender roles. This observation aligns with research by Alfieri et al. (2015a), which highlights how family obligations disproportionately impact women's labor market participation. Notably, the caregivers in our study display higher motivation to engage with PES primarily for economic support, suggesting that financial incentives could alleviate some pressures associated with their caregiving roles, enabling a partial re-engagement with the labor market. However, these findings also suggest the need for more comprehensive family support policies within PES to address caregiving burdens, a strategy that has shown efficacy in similar populations internationally (Simoes et al., 2017). Moreover, the differentiated motivations for approaching PES across NEET profiles highlight the importance of understanding individual engagement drivers within each subgroup. For example, "Young Educated Unemployed NEETs" prioritize training and job search support, indicating a need for skill-building services and clear pathways to employment. This is consistent with findings by ANPAL (2020) that suggest that young jobseekers, especially those who are new to the labor market, benefit most from targeted training and orientation services. Building tailored pathways inherently requires the establishment of trust, as nurturing individuals' confidence in PES is a crucial foundation—not only for the transition to fully digitalized services, as highlighted in Simões and Marta (2024), but also for the effectiveness of PES in general (Marzana et al., 2024). These insights support the argument for a differentiated approach within PES, wherein service offerings are tailored to the distinct needs of each NEET profile. For instance, policy strategies that include conditional cash transfers tied to training or job search milestones could be effective for financially vulnerable groups, while specialized career counselling and job matching could better serve educated NEETs experiencing skill mismatch. This approach is supported by the work of Marzana et al. (2024), who advocate for multi-dimensional intervention models that combine financial, educational, and psychosocial support in a single framework, a model particularly relevant



in high-NEET-rate regions like Italy. In addition, the study's findings on NEETs' openness to various employment conditions reveal a significant willingness among certain profiles to adapt, such as moving abroad or accepting part-time and temporary work. However, this adaptability is not uniform across all groups; for instance, "Affluent Rural Caregivers in Northern Italy" show less flexibility regarding relocation, reflecting how social and familial ties can act as constraints. This observation aligns with Ellena et al. (2021b), who noted that rural NEETs often face stronger social constraints due to familial expectations or local community ties, which limit their labor mobility. These constraints highlight the need for regionally customized interventions that consider local social structures and family dynamics. In rural areas, for example, strengthening local employment opportunities through regional economic initiatives could provide a viable alternative to relocation-based solutions (Ellena et al., 2024). Furthermore, the significant motivation to accept temporary or part-time work among various NEET profiles suggests that policies promoting flexible employment options could be particularly effective. Flexible job arrangements may serve as a stepping stone for young NEETs, allowing them to gain work experience while accommodating personal or educational constraints. Thus, PES could enhance its impact by developing partnerships with local businesses to create flexible roles that meet NEETs' availability, particularly in high-NEET regions.

# 9 Conclusion, Limitations and Practical Implication

While this study offers valuable insights into the heterogeneity of NEET youth in Italy, several limitations should be acknowledged. The use of non-probabilistic snowball sampling and social media recruitment strategies, although effective for accessing a hard-to-reach population, limits the statistical representativeness of the sample and prevents generalization of the proportions of the identified latent classes to the broader NEET population. Nevertheless, the sample size is robust for this specific target group and adequately captures diversity across gender, geographic area, and age. Importantly, the primary objective of this exploratory Latent Class Analysis was not to estimate population-level distributions, but to uncover meaningful patterns and profiles within the NEET population. Despite methodological constraints, the findings provide a valuable basis for understanding distinct NEET subgroups and the different barriers they face. The study also highlights a key challenge in NEET-focused research and policy: the difficulty of identifying and engaging this population. In this regard, the successful collection of data from 970 NEETs—many of whom are typically disengaged from institutional services—underscores the relevance of the profiles identified. However, the cross-sectional nature of the study does not allow for an analysis of how NEET status and subgroup affiliation may evolve over time. Future research should incorporate longitudinal designs to capture the dynamics of labor market disengagement and re-entry. From a practical perspective, the findings suggest several implications for PES and policymakers. First, interventions should be tailored to the specific characteristics and needs of each NEET profile. For example, economically disadvantaged caregivers may benefit from integrated support that combines financial aid with accessible childcare services, while educated yet discouraged NEETs may require individualized job matching and counseling to rebuild confidence and align their qualifications with labor market opportunities. Furthermore, the diversity in willingness to accept flexible employment conditions suggests



that PES should develop differentiated strategies to support job mobility and adaptability—especially in regions where relocation or non-standard employment remains a structural necessity. Lastly, considering Italy's commitment to reducing NEET rates under the UN 2030 Agenda for Sustainable Development, the implementation of targeted, profile-sensitive approaches could significantly enhance policy effectiveness, reduce youth marginalization, and foster more inclusive pathways to meaningful employment.

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**Data Availability** The data that support the findings of this study are not publicly available due to privacy or ethical restrictions. However, anonymized datasets may be made available from the corresponding author upon reasonable request. Any data sharing will be considered in accordance with participant consent and institutional ethical approval.

#### **Declarations**

**Conflict of Interest** All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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