



The economy and career choices scale: Construction and initial validation

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Abstract

Today's youth have grown up according to a largely neoliberal dominance. To assess youth's views of the economy in relation to their career choices, we developed the Economy and Career Choices Scale (ECCS). Two studies involving Italian youth were conducted to develop the scale and examine its psychometric properties. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) conducted with two groups of high-school students confirmed the two-factor structure, specifically related to thoughts more consistent with a neoliberal view of the economy and thoughts in tune with a more equitable and supportive conception of it. Moreover, correlational analyses were conducted with the Career Adapt-Abilities Scale and Views of the Future Scale.

Keywords Economic thought · Neoliberalism · Vocational guidance · Scale development

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Résumé

La jeunesse d'aujourd'hui a grandi selon une dominance largement néolibérale. Pour évaluer les vues des jeunes sur l'économie par rapport à leurs choix de carrière, nous avons développé l'échelle des choix de carrière et de l'économie (ECCS). Deux études impliquant des jeunes Italiens ont été menées pour développer l'échelle et examiner ses propriétés psychométriques. L'EFA et l'analyse CFA réalisée avec deux groupes d'élèves du secondaire ont confirmé la structure à deux facteurs, spécifiquement liée à des pensées plus cohérentes avec une vision néolibérale de l'économie et des pensées en accord avec une conception plus équitable et solidaire de celle-ci. De plus, des analyses de corrélation ont été menées avec l'échelle d'adaptabilité de carrière et l'échelle de vision de l'avenir.

Zusammenfassung

Die heutige Jugend ist nach einer weitgehend neoliberalen Dominanz aufgewachsen. Um die Ansichten der Jugendlichen über die Wirtschaft in Bezug auf ihre Berufswahl zu bewerten, haben wir die *Wirtschafts- und Karriereauswahl-Skala (ECCS)* entwickelt. Zwei Studien mit italienischen Jugendlichen wurden durchgeführt, um die Skala zu entwickeln und ihre psychometrischen Eigenschaften zu untersuchen. EFA und CFA-Analysen mit zwei Gruppen von Gymnasiasten bestätigten die Zweifaktorenstruktur, speziell in Bezug auf Gedanken, die mehr mit einer neoliberalen Vision der Wirtschaft übereinstimmen, und Gedanken, die mit einer gerechteren und unterstützenderen Auffassung davon übereinstimmen. Darüber hinaus wurden Korrelationsanalysen mit der Karriereanpassungsfähigkeiten-Skala und der Skala zur Zukunftsvision durchgeführt.

Resumen

La juventud de hoy ha crecido de acuerdo con un dominio en gran medida neoliberal. Para evaluar las opiniones de los jóvenes sobre la economía en relación con sus elecciones de carrera, nosotros desarrollamos la *Escala de Elecciones de Carrera y Economía (ECCS)*. Se realizaron dos estudios con jóvenes italianos para desarrollar la escala y examinar sus propiedades psicométricas. Los análisis EFA y CFA realizados con dos grupos de estudiantes de secundaria confirmaron la estructura de dos factores, específicamente relacionada con pensamientos más consistentes con una visión neoliberal de la economía y pensamientos en sintonía con una concepción más equitativa y solidaria de la misma. Además, se realizaron análisis correlacionales con la Escala de Adaptabilidad de Carrera y la Escala de Visión sobre el Futuro.

The new generations face an existence different from the past, characterized by insecurity, a defining feature of contemporary work and life (Rydzik & Bal, 2023). This is attributed to the current economic culture of neoliberal ideology that most nations and countries in the developed and developing world have adopted (Hooley & Sultana, 2016; Harvey, 2005; Rubery et al., 2016). Although the penetration and implementation of these policies differ according to context, we talking about, as also suggested by Sultana in 2017, a “policy construct” that “straddles a wide range

of social, political and economic phenomena at different levels of complexity” (Saad-Filho & Johnson, 2005, p. 1).

This led to the undermining of life due to there being a limited possibility of assuming a definite role in society. The progressive dissolution of organized solidarity is also due to the increased precariousness of human relationships and social protections. Said dissolution has promoted a devious communal drive that has strengthened the dangerous polarization between the in-group and the out-group, solidifying nationalistic, local, family-based, and individualistic positions (Bauman, 2001; Gremigli, 2020).

For career planning and life design, it is increasingly important to take into consideration that facing the future also involves dealing with some alarming global threats. Such threats include inequalities, wealth and job polarization, precarious working conditions, the need to become more competitive, constant readiness to face unexpected opportunities, and pressure to become a self-employed entrepreneur despite limited or no capital to invest (Authors, 2021; Hooley et al., 2018; Skhovus & Thomsen, 2017). Within this context, the careers field would do well to recognize and account for the influence of neoliberal principles, policies, and practices on career construction for youth (Azevedo et al., 2019). To that end, we report on the development and initial validation of a measure designed to assess youth’s perspectives on neoliberal culture, characterized by more profit-centered oriented economies, and on socially oriented culture, characterized by more solidarity-centered economies mindful of forms of redistribution and wealth (Hooley & Sultana, 2016).

Neoliberalism

The term “neoliberalism” refers to political-economic policies that suggest that human well-being can be better promoted by placing individual freedom and business skills in an institutional framework characterized by robust rights to private property, a free market, and free trade (Harvey, 2005). Such “reconfigurations” (Harvey, 2005, p. 78) include the downsizing of the public sector, privatization of state assets, deregulation of markets, and withdrawal or restriction of funding for welfare regimes and erstwhile free public services that social democrats had established over decades of struggle. Neoliberalism gained prominence in Europe during the late twentieth century as a response to economic challenges. The collapse of the Soviet Union and the ideological shift toward market-oriented solutions further propelled neoliberalism. The Maastricht Treaty of 1992 laid the foundation for economic integration in the European Union, fostering a neoliberal approach to economic governance. However, the global financial crisis of 2008 led to increased scrutiny of neoliberal policies, with debates over their impact on economic stability, social inequality, and the state’s role in the European context (Hermann, 2007; Holley et al., 2018).

Neoliberalism spurred widespread belief that individual well-being relates to individual entrepreneurial freedoms and skills within an institutional framework

characterized by substantial property rights, free markets, and free trade (Harvey, 2005). Individual freedom is the most substantial value of neoliberalism, and it is an effective instrument for promoting the implementation of free-market economic principles and values in all aspects of life (Shymko & Frémeaux, 2022).

Neoliberalism involves extensive and invasive intrusions into vast areas of social life, including the most personal—for instance, the choice of vocation, work and career (Holley & Sultana, 2016). For example, constant improvement is essential, and there is a seemingly tireless quest for new products, markets, and ideas; competition becomes what allows improvement and is the source of social development for the individual (Galli, 2017; Laval, 2013; Nevrakadis & Giroux, 2015).

The rise of neoliberalism, in line with other social challenges, such as globalization, has contributed to significant changes in work, exemplified by platforms such as Uber and the increase in precarious employment. Neoliberal economic policies emphasizing deregulation and market-oriented reforms facilitated the growth of global corporations' gig economy (Tirapani & Willmott, 2023). The gig economy reflects a shift toward temporary and contingent work, often without traditional job security or benefits, as companies prioritize flexibility and cost-cutting measures. Critics argue that this trend underscores the negative consequences of neoliberal policies, including the erosion of stable employment and the exacerbation of income inequality on a global scale.

Likewise, many government activities designed to realize the common good and social and distributive justice have been reduced or eliminated. Paradoxically, various studies have demonstrated that neoliberalism's freedom paradigm has created multiple obstacles to individual liberties (Bal & Dóci, 2018). Market-based reforms that eliminated labor protection and collective bargaining power, labelled flexible labor markets (Jones, 2012), were intended to produce more excellent social outcomes by unleashing the power of human initiative and providing autonomy for decision-making.

Conceiving of political and economic life within a neoliberal worldview is the foundation from which consistent inequalities are created, with immense wealth in the hands of a few and multitudes of people living in conditions involving precariousness, poverty, starvation, and misery (Gallo, 2019; Stiglitz, 2019). A neoliberal ideology characterized by a belief system that defends, bolsters, and justifies social and economic disparities under capitalism dominates life in Western societies today (Monbiot, 2016). Moreover, it advances notions of freedom, liberty, free trade, competition, opportunity, wealth, diversity, consumption, and markets (Grzanka et al., 2020).

Neoliberalism and youth career construction

Neoliberalism transformed the relationship between citizens, political institutions, and markets. It is considered to be new kind of common sense characterized by competition, individuality, selfishness, and insufficient attention to solidarity, collaboration, social responsibility, relationships, and, in general, sustainability

and inclusion (Hooley et al., 2018). This is particularly relevant for youth (Allsop et al., 2018). Youth, defined here as individuals born in the early 2000s, are the first generation living under neoliberal dominance, which has been transformed over the past 30 years. This means that phenomena, such as inequality, privatized public services, and empowerment culture, are not new to nor publicly contested by youth. Instead, these phenomena are the standard in the society and political culture in which youth grew up. Neoliberal policies also severely expended trust in many forms of collective decisions, forcing many young people to be involved in competitive environments in increasing areas of their lives, such as education (Allsop et al., 2018). As suggested by Hooley and Sultana (2018), there is a growing emphasis on aligning education with the evolving demands of the workforce, prioritizing increased efficiency. In contemporary society, as industries rapidly change and technology advances, there is a perceived need for educational systems to equip individuals with skills directly applicable to the working world. Consequently, young people are frequently responsible for and pressured about educational and occupational successes and act in a broader social context, marked by extreme inequalities and social fragmentation.

Various studies indicate that there are meaningful and replicable differences between a fairer and more supportive economic way of thinking and a neoliberal ideology in terms of future choices and behaviors (Caprara & Vecchione, 2017; Della et al., 2015; Klofstad et al., 2013; Xu & Peterson, 2017; Xu et al., 2013; Zmigrod et al., 2018). Youth with fairer and more supportive economic thinking are generally more curious and creative. Youth with neoliberal economic thinking tend to be more optimistic, with a self-concept that does not present happiness as a state of the individual but as a goal, a capitalistic challenge to achieve through a strategic plan of emotional well-being that stresses self-care (Binkley, 2014; Womick et al., 2019).

Further studies highlight existing relationships between economic attitudes and the critical conscience levels of younger generations (see Cabrera et al., 2014; Hess, 2004; Prilleltensky, 2014). Specifically, Grzanka et al. (2020) underlined how a fairer and more supportive economic attitude allows young people to critically analyze social inequalities (e.g., gender inequalities in the workforce are caused by women not being treated fairly in the workplace). In contrast, a neoliberal view focuses on more individualistic inequalities (e.g., gender inequalities in the workplace result from the incapability of women to break the glass ceiling).

Perry (2005) suggested that neoliberal culture is so deeply rooted in younger generations that this view of the world seems to be conceived of as a given and is rarely questioned, even if there are some youth activism groups for social justice calling for increased government intervention, wealth redistribution, and systemic changes to address issues such as economic inequality, racial injustice, and environmental concerns. However, among the broader youth population, those actively engaging in activism focusing on social justice constitute a minority due to the awareness of social challenges (Nota et al., 2019). Youth can become aware of a social problem, such as the low salaries that teachers earn or the lack of funding in the healthcare field. However, they cannot connect the situation to the neoliberal economy's general principles. For these reasons, when thinking about and planning

career interventions, some recent economic reflections can be helpful. In this regard, Hooley et al. (2019) highlighted the consequences of neoliberalism on macro, meso, and micro levels. Specifically, they asserted that neoliberalism's economic views of the future could impact social justice and spread social inequalities in youths' future designs. In this way, career counseling can become the tool that encourages youth to think about the future by suggesting they connect economic well-being to social and environmental well-being. Similarly, youth can be encouraged to refute perspectives and practices involving growth and development subject to the market, infinite competition, the law of the jungle, and interest only in individual short-term profit and not in long-term development for everyone (long-term economy; Authors, 2021).

In line with this, vocational guidance and career counseling encourage youth to consider external realities and what will happen in the future by remembering that the economy is not the cornerstone of all society and the way of living. Counselors must assist youth in recognizing how distorted views of reality may form their views of the future and help them act to avoid accepting such a mindset as shared, legitimate, and fixed. It is also essential to contradict the prevailing idea that, in the name of the economy, it is possible to disavow the social costs and avoid facing ethical and social responsibility matters (Nevrakadis & Giroux, 2015). Brewster and Molina (2021) suggested that, rather than promoting self-care as an individual-level strategy, vocational guidance and career counseling may support clients in rethinking labor policies critically by considering the socioeconomic macro system. Career service providers should invest in assisting clients to design life careers characterized by inclusion and sustainability and based on social justice. In so doing, they can help clients reflect on the economic situation and develop an awareness of its consequences on the labor market and individual life-career design processes.

Research goal

As Hooley et al. (2019) suggested, more vocational psychology research needs to consider the structural constraints of the economic and political systems in which we live. To this end, specific assessment instruments could be validated to assist youth in taking into consideration the challenges of neoliberalism and the idea of sustainable development as it is related to their future educational and work choices. Considering that neoliberalism is a global phenomenon, such measures need to be context-sensitive and able to assess individual perception cues to political and economic context demands (Grzanka et al., 2016).

Few published studies address quantitative instruments for assessing neoliberalism and social and economic thought among youth. Perry (2005) developed nine neoliberal items that span a variety of issues for adults between 18 and 90 years of age. There are broad matters of principle, such as competition being good or harmful, private versus government ownership, who should appoint the managers of the business; collective versus individual responsibility, questions about equality making incomes more equal; why people live in need; questions about government regulation of business; and free trade. Perry's instrument aimed

to analyze neoliberalism as a trend over time between 1998 and 2004. For every one of the nine neoliberal indicators, Perry (2005) found that there has been an increase in the proportion of respondents supporting the neoliberal side over the past 6 years. Analysis of Perry's measure yielded three factors related to the underlying domain: (a) individual responsibility and inequality, (b) competition and private versus government ownership, and (c) free trade. Grzanka et al. (2020), drawing on the multidisciplinary literature on neoliberalism, selected 125 items from various psychometric tools that reflect how participants resist neoliberal ideology, specifically color-blind racism, no sexism, and meritocracy.

Despite growing attention to the topic of neoliberalism in career guidance (Blustein et al., 2019; Brewster & Molina, 2021; Hooley et al., 2018), we know of no instruments that have been developed to assess youth's tendency to reflect on the economy as they consider their future career choices. Creed et al. (2011) suggested that individuals do not operate independently of their social environment; thus, individuals' thoughts about the economy may be predicated on the environmental support they receive. Supportive work environments (i.e., support from coworkers, supervisors, and, more generically, from the organization) are associated with developing and maintaining more collaborative economic thought (Weisenberg & Aghakhani, 2007). For example, a consistent finding in the organizational literature is that perceived on-the-job support is associated with valuing and engaging in nonpaid citizenship behaviors that benefit the organization (Randall et al., 1999). The mechanism for these relationships relates, at least in part, to supportive environments that reduce individual anxiety, increase efficacy, and foster creative problem-solving (Babin & Boles, 1996). In this way, attending to economic thoughts in career counseling and vocational guidance could help when taking into consideration the relationship between the economic view of reality and the future outlook of work, training, and a critical view of reality. With this in mind, we constructed the Economy and Career Choices Scale (ECCS) designed to assess youth's thoughts about the economy and their future career choices.

Purpose of the study

In two studies, we aimed to construct and initially evaluate the psychometric properties of the ECCS, including the measure's construct validity (internal consistency and concurrent validity). Study 1 involved developing the scale items and verifying their reliability and construct validity. In Study 2, we examined the stability of the ECCS factor structure identified in Study 1 and the concurrent validity of scores on the measure.

We expected the ECCS to measure two aspects of economic future thought: (a) thoughts consistent with a neoliberal view of the economy and (b) thoughts consistent with a more equitable and supportive view of the economy. We expected to achieve internal consistency indices for the ECCS of at least 0.70, which is considered an acceptable level of reliability (Nunnally & Bernstein, 1994). Because neoliberal thoughts have been associated with optimism (Byrne, 2014), we predicted that thoughts more consistent with a neoliberal view of the economy as measured

by the ECCS would correlate positively with scores on optimism, concern for the future, and locus of control. We also expected that thoughts consistent with a more equal and supportive view of the economy as measured by the ECCS would correlate positively with scores when it came to a measure of curiosity.

Study 1: Scale construction and exploratory factor analysis

The goals of Study 1 were to (a) generate a range of items representing thoughts more consistent with a neoliberal economic view and thoughts more consistent with an equitable and supportive economic view and (b) examine the internal consistency reliability and factor structure of the ECCS. To develop ECCS items, we reviewed the literature by searching for relevant keywords in the PsycINFO and Web of Science databases, such as “neoliberalism” and “social economy.” A total of 14 items were identified on the basis of the literature. We constructed seven items related to a neoliberal economic view and seven related to a more equitable and supportive conception of the economy. The content validity of the items was assured by creating items that closely resembled existing items from established scales. Three independent raters (a doctoral student, a research fellow, and an assistant professor in psychology) with scale construction experience and knowledge of the constructs evaluated the items for clarity, representativeness, and uniqueness. We set all items on a five-point Likert-type scale, with one indicating “strongly disagree” and five indicating “strongly agree” with the statement contained in the item. A pilot study with 30 high school students [15 boys and 15 girls; mean age (M_{age}) = 17.81 years, standard deviation (SD) = 0.90] ensured that items were appropriate and comprehensible and achieved internal consistency indices of at least 0.70 (Nunnally & Bernstein, 1994).

Method for Study 1

Participants and procedure

The participants were 370 Italian high school students (176 boys and 194 girls) aged between 16 and 21 years (M_{age} = 17.46 years, SD = 0.82). The ECCS was administered to these participants, who voluntarily participated. All participants and their parents signed consent forms for career counseling and vocational guidance activities implemented at the participants’ school. At the end of the administration, a personalized report was given confidentially to each participant.

Results of Study 1 An examination of the asymmetry and kurtosis values revealed that 11 items were satisfactory (all values were ≤ 1), suggesting that three items did not conform to the assumptions of confirmatory factor analyses for this sample. Therefore, a principal axis factor (PAF) analysis was conducted on the 11-item scale to estimate the number of factors. Bartlett’s test of sphericity supported the factorability, χ^2 (55, N = 370) = 432.175, p < 0.0001, and the Kaiser–Meyer–

Table 1 Items, component loading, and communality estimates for the Economy and Career Choices Scale

Items	1	2	Communality
5. To foster the economy, the state should be responsible for ensuring that everyone has the necessities to live with dignity.	0.66	0.38	0.42
4. To foster the development of the economy and employment, it is necessary to ensure that wealth and welfare are equally distributed.	0.65	0.12	0.40
9. To foster the economy, employment, and professional fulfillment, there should be a greater emphasis on the presence of support and services provided by the state in the labor market.	0.51	0.15	0.30
10. To foster the economy, employment, and professional fulfillment, it should be ensured that wage gaps are narrowed and that equal earning opportunities are effectively realized for all.	0.55	0.18	0.23
14. For a satisfactory economic and social future, states should supervise and regulate large corporations and multinationals more closely and strictly.	0.43	0.23	0.21
13. Rather than depending on individuals, poverty and unemployment relate to how the economy is regulated and how social supports and opportunities are organized and managed.	0.43	0.23	0.19
2. To boost the economy, employment, and professional fulfillment, greater gains should be guaranteed for those with initiative and who work harder.	-0.18	0.60	0.35
1. To promote employment and professional fulfillment, the main focus should be on competition, encouraging people to engage and develop new ideas.	-0.17	0.56	0.29
3. To reduce poverty and the risk of unemployment, it is necessary for people to be busy. Work is not and will not be there only for those who do not seek it and do not want to engage in it.	-0.03	0.46	0.20
11. To foster the economy and employment, each person needs to make more effort to procure the necessities to live with dignity.	-0.10	0.42	0.21
6. To foster the economy, development, and job possibilities, individual citizens should be allowed more free rein, as well as free competition, private ownership, and privatization.	-0.30	0.41	0.19

Olkin measure of sampling adequacy was 0.76 (Tabachnick & Fidell, 2001). The final run of PAF on the two-factor oblique solution with 11 items accounted for 60.88% of the total variance, as seen in Table 1. The first factor contained six items [mean (M) = 3.67, SD = 0.60], accounted for 36.84% of the variance, and concerned thoughts consistent with a more equitable and supportive view of the economy. The second factor contained five items (M = 3.63, SD = 0.62), accounted for 24.04% of the variance, and referred to thoughts more consistent with a neoliberalism view of the economy. The intercorrelation among the two factors was 0.53. For Factor 1, Cronbach's α (measuring consistency reliability) was 0.75, and for Factor 2, it was 0.79. The reliability of all items considered together was 0.50. No gender differences were found between Factor 1 ($t(370) = 3.71$; $p = 0.060$) and Factor 2 ($t(370) = 2.26$; $p = 0.106$).

Discussion regarding Study 1 The preliminary analysis showed satisfactory concurrent validity for 11 items of the ECCS. Construct validity expectations were confirmed, and the exploratory factor analysis identified two factors with factor loadings of > 0.40 . Finally, the factors were strongly interrelated (0.53) and showed adequate levels of internal consistency (0.75 and 0.79). Thus, the initial results from Study 1 suggested that the ECCS items are psychometrically adequate and measure two distinct constructs and seem appropriate for use with a broad range of Italian youth.

Study 2: Confirmatory factor analysis and concurrent validity

The goals of Study 2 were (a) to test the multidimensional structure of the ECCS using confirmatory factor analysis with the maximum likelihood estimation method (Li, 2016) and (b) to evaluate its concurrent validity. Concerning our first aim, we compared two models of the ECCS: the hypothesized model and one alternative model. The hypothesized model (H: 11-2) predicted that items would be clustered into two factors. The alternative model hypothesized that all 11 items would correspond to a single factor. Therefore, we predicted that the 11-2 model would fit the data better than the alternative model.

Our second goal was to examine the instrument's concurrent validity related to an optimistic view of the future and career adaptability. Specifically, we predicted positive low to moderate correlations between thoughts more consistent with a neoliberal view of the economy, youth levels of optimism, and scores on a measure of the concern, control, and confidence dimensions of career adaptability. We also expected that thoughts consistent with a more equal and supportive view of the economy would correlate positively with scores on a measure of the curiosity dimension of career adaptability.

Method for Study 2

Participants and procedure

The sample comprised 402 Italian high school students, aged from 17 to 19 years ($M^{age} = 17.47$, $SD = 0.64$), 171 (43%) of whom were boys and 231 (57%) girls. Students were involved using the same procedure adopted in Study 1.

Measures

Optimism We measured optimism using the five-item Views of the Future Scale (VAS; Ginevra et al., 2017). An example of an item is “Usually, I am full of enthusiasm and optimism.” The total score ranged from 5 to 35, with higher scores indicating greater optimism. The scale showed a good reliability score of 0.86. In this study, Cronbach’s alpha was 0.85.

Career adaptability We used the 24-item Career Adapt-Abilities Scale (CAAS Italian-Form; Soresi et al., 2012) to measure career adaptability. Participants responded to each item on a scale ranging from 1 (not strong) to 5 (strongest). The items combined into a total score indicating career adaptability. They were also divided into four subscales that measured specific adaptability resources: concern (e.g., “Realizing that today’s choices shape my future”), control (e.g., “Counting on myself”), curiosity (e.g., “Investigating options before making a choice”), and confidence (e.g., “Working up to my ability”). The CAAS-Italian form showed good reliability, equal to 0.90 for the total score. Cronbach’s alpha for this sample was 0.84, 0.80, 0.81, and 0.85 for the four subscales and 0.93 for the total score.

Results of Study 2

To test the two-factor model, we conducted confirmatory factor analyses with Mplus on the original data set. To determine the degree of model fit, we adopted a cluster of criteria on goodness-of-fit statistics: a comparative fit index (CFI) ≥ 0.90 , a Tucker–Lewis index (TLI) ≥ 0.90 , a root mean square error of approximation (RMSEA) ≤ 0.08 , and a standardized root means square residual (SRMR) ≤ 0.06 (Hu & Bentler, 1998; Schermelleh-Engel et al., 2003). In addition, we compared alternative models: a first-order model in which items were allowed to load on their respective factors (11-2) and a second-order factor model in which 11 items were loaded on a single factor. The analysis was performed with Mplus for variables with maximum likelihood estimation. The hypothesized two-factor correlated model (H: 11-2) showed a good fit: $\chi^2(22, N = 402) = 77.124$; $p < 0.001$; CFI = 0.853; TLI = 0.860; RMSEA = 0.020 [90% confidence interval (CI) = 0.054–0.089]; and SRMR = 0.058. The alternative model (A2: 11-1) did show a significant fit: $\chi^2(22, N = 402) = 77.124$; $p < 0.001$; CFI = 0.644; TLI = 0.5250; RMSEA = 0.109 (90% CI = 0.94–0.124); and SRMR = 0.086.

Table 2 Correlations among scores on the *Economy and Career Choices Scale*, Career Adapt-Abilities Scale, and Views of the Future Scale

Thoughts on the development and economy of the future scale	Career Adapt-Abilities Scale				Views of the Future
	Concern	Control	Curiosity	Confidence	Optimism
Neoliberal view of economics	0.127**	0.168**	0.083	0.123**	0.189**
Equitable and supportive view of economics	0.097	0.067	0.177**	0.058	-0.017

* $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$

Table 2 lists correlations among scores on the measures. As expected, the neoliberal view of economics was positively associated with optimism, control, and confidence about the future, and thoughts in tune with a more equitable and supportive conception of the economy were positively associated with curiosity. However, the correlation values were relatively low, ranging from 0.11 to 0.18.

Discussion of Study 2

Study 2 was conducted to examine the stability of the 11-item ECCS factor structure. Confirmatory factor analysis showed that the two-factor structure yielded in Study 1 was stable with another sample of Italian youth. In addition, all factor loadings were significant and > 0.41 , suggesting that the items well represented the two factors. Regarding concurrent validity, ECCS scores correlated as expected with CAAS and VAS Optimism scale scores. The correlation matrix also showed that, as expected, higher levels of thought related to the neoliberal view of economics were associated with higher levels of optimism, control, and confidence in the future.

General discussion

We conducted two studies to construct and validate a scale to measure two views on the economy regarding career choices. The results of the two studies combined provide psychometric support for the ECCS. In Study 1, item content validity was supported by reference to the literature, pilot testing, and use of expert raters. Construct validity of the scale was supported by Exploratory factor analysis (EFA) and showed a factor structure characterized by two correlated subtests regarding thoughts more consistent with a neoliberal view of the economy and thoughts in tune with a more equitable and supportive conception of it. Items showed good reliability and a moderate correlation between the two factors.

Confirmatory factor analysis conducted in Study 2 with a new group of high-school students confirmed the two-factor structure found in Study 2. Moreover, correlational analyses conducted with the Career Adapt-Abilities Scale and Views of the Future Scale indicated that thoughts aligned with a more equitable and supportive conception of the economy but differed in terms of career adaptability and optimism. Specifically, results suggested that youth with higher levels of thought

more consistent with a neoliberal view of the economy were characterized by a propensity to maintain more intraindividual career adaptability resources (concern, control, and confidence) and felt optimistic (DellaPosta et al., 2015; Womick et al., 2019). These results also suggest that youth with higher levels of thoughts in tune with a more equitable and supportive conception of economics were characterized by a propensity to deal with the contextual resources of career adaptability (curiosity), which leads people to analyze different career paths in the context and not only those that the economic market tends to offer (Down et al., 2019).

Overall, the results of the present study provided new information about thoughts on the development and economy of the future in Italian youth. Specifically, the results obtained emphasized the importance of examining and studying youth economic thoughts, especially during periods of transition, such as high school and university or work experience, as critical analysis of the context that allows them to analyze the reality in which they make decisions so that these are not dictated only by individualistic and narcissistic points of view but are also focused on the collective good (Authors, 2021.; Hooley et al., 2019). In this respect, the propensity to take time and think about the economy and the ability to consider not just themselves as ready to face challenges and threats but also the environment in which they live is helpful to promote the more adaptive career development of youth in current times (Masten & Tellegen, 2012).

Limitations and future research directions

We did not test the convergent discriminant and incremental validity of the instrument. Therefore, additional research is needed to investigate relations among the ECCS scale and other scales that assess youth economic thought. It would be interesting to correlate the scales with the socioeconomic level, the educational level, and other critical demographic variables we did not consider in the present study.

Furthermore, the questionnaire is based on self-reported information that should not be underestimated, and a multi-trait, multi-method study design should be used to examine how self-report and informant-report scores correlate. Finally, test–retest measures should also be introduced in further research studies.

Practical implications

The present study results provide initial support for using the ECCS in vocational guidance and career counseling activities designed to support youth in the process of their life design in a sustainable and inclusive way and to promote knowledge of economic systems and how they can influence their future and the future of the people around them (Authors, 2019; Savickas et al., 2009). This instrument could help investigate high school students' thoughts and ideas about their future and their propensity to think about future economic challenges. In pre- and posttest sessions, it could also be helpful to verify the effectiveness of career education programs aimed at strengthening the aspiration of high school students for a sustainable and inclusive

future aimed at analyzing contextual phenomena and creating less egocentric views regarding career decision-making. Finally, it could be used in vocational guidance activities where students learn about seeking answers to critical questions, such as how to develop a healthy and sustainable environment and communities where people are valued for who they are rather than what they contribute to the economy (Hursh et al., 2011). Paskov et al. (2013) highlighted that living in countries characterized by high levels of neoliberalism seems to be associated with obsessions over status and success and the desire to be the object of admiration, as well as the anxiety and stress to be socially and materially left aside and social competition. In carrying out these activities, professionals may ask what kinds of relations youth nurture, what kinds of social relations they cultivate, what kind of work they want to do for others' well-being, and what kinds of culture and technologies they want to see created. These questions require that career practitioners help youth problematize the idea of neoliberal marketization to begin constructing new markets that are more equitable and sustainable (Authors, 2021; Grzanka et al., 2020).

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Declarations

Conflict of interest The authors declare no conflicts of interest related to this research.

Ethical approval These studies were conducted according to the code of ethics of the Italian Association of Psychology, Informed Consent (Associazione Italiana di Psicologia—AIP), and an ethics committee was not required.

Informed consent Informed consent was obtained from all participants involved in the study. Participants were provided with comprehensive information about the study, and their voluntary participation was explicitly confirmed in writing.

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