

DEVELOPMENT AND VALIDATION OF A SCALE FOR MEASURING PERCEIVED CAREER AGENCY IN ADOLESCENTS IN TRANSITIONAL ORIENTATION IN FRENCH MIDDLE SCHOOLS

DESARROLLO Y VALIDACIÓN DE UNA ESCALA PARA MEDIR LA AGENCIA DE CARRERA PERCIBIDA EN ADOLESCENTES EN TRANSICIÓN DE ORIENTACIÓN EN COLEGIOS FRANCESES

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Sihem Ollivier¹, Isabelle Soidet¹

¹. Université Paris Nanterre, Laboratoire Parisien de Psychologie Sociale, Nanterre, Francia

ABSTRACT

Despite the personal agency, a person's perceived capacity to self-lead their own life, is a central concept in career psychology, there are still few measurement scales adapted to the French context and for adolescents. The aim of the current work was to develop and validate a scale designed to assess the agency of adolescents preparing for their first career transition (Bandura, 1986, 1999). An exploratory ($n = 215$) and confirmatory ($n = 220$) study were carried out to explore the psychometric properties of the perceived career agency scale in a sample of students finishing their secondary school in France. The results demonstrated the good psychometric qualities (validity, reliability) of the French version of the career agency scale for the targeted adolescent sample. In addition to the theoretical and practical implications, future research avenues to assess career agency during transition period are discussed, both conceptually and methodologically.

KEYWORDS: perceived career agency, capability, measurement scale, school transitions, adolescence.

RESUMEN

A pesar de que la agencia, o la capacidad percibida de una persona para autodirigir su vida, es un concepto central en la psicología de la carrera profesional, todavía existen pocas escalas de medición adaptadas al contexto francés y para adolescentes. El objetivo del presente trabajo es el desarrollo y validación de una escala diseñada para evaluar la agencia de los adolescentes que se preparan para su primera transición profesional (Bandura, 1986, 1999). Se llevó a cabo un estudio exploratorio ($n = 215$) y confirmatorio ($n = 220$) para explorar las propiedades psicométricas de la escala de agencia profesional en una muestra de estudiantes que culminaban sus estudios secundarios en Francia. Los resultados demostraron las buenas cualidades psicométricas (validez, fiabilidad) de la versión francesa de la escala de agencia de carrera percibida para la muestra objetivo de adolescentes. Además de las implicaciones teóricas y prácticas, se discuten futuras vías de investigación para evaluar la agencia de carrera en las transiciones profesionales, tanto conceptual como metodológicamente.

PALABRAS CLAVE: agencia de carrera percibida, capacidad, escala, transiciones escolares, adolescencia.

Self-agency, which can be commonly defined as the desire and capacity to act, not only on oneself but also on others or one's life contexts, has become a key construct to understand and promote lifelong career development. It is therefore essential to develop and have methodologically rigorous psychometric tools to assess career agency (Chen & Hong, 2020), especially during adolescence, which is a critical period in the construction of early educational and professional aspirations (Soidet et al., 2024).

As part of this international debate on the measurement of career agency, the development of culturally relevant assessment tools becomes essential not only to explore the nature and correlates of career agency, but also to respond to the demands of counseling psychologists and career guidance practitioners (Soidet et al., 2024; Battistelli & Bazine, 2022). Some of the main reasons for the importance of assessing career agency in the school transition process are related to social transformation, social justice, and the development of career agency in school age.

From a social transformation standpoint, in a changing (Allan et al., 2021) and uncertain (Blustein, 2019) world of work, where professional careers are increasingly non-standard (Urbanaviciute et al., 2024), it is essential not only to become the main actor of our professional path from an early age (Hall et al., 2018), but also to have the capacity to identify what is required for professional success (Hirschi et al., 2017). At different levels of the vocational and professional path (e.g., anticipatory, developmental, and adaptive), the career agency "appears promising to the extent that its role can be considered as an antecedent for the promotion of the development of capacities and skills and exert a favorable influence on the organizational context" (Battistelli & Bazine, 2022, p. 69).

From a social justice viewpoint, the development of agency in the field of career contributes to what Sen (1999) calls

capability, or the possibility for a person to make choices or set goals, both academic and professional, in line with what they value, and then achieve such a goal. That is, understanding and studying career agency from an early age helps young people build new and better personal and professional opportunities (Soidet et al., 2024).

In line with the above, and to close this gap in the literature on career agency, we propose the psychometric development and evaluation of a scale that measures the perception of career agency in middle school students adapted to the French context and language. Following the current recommendations of the iterative process of psychometric instrument development (Sireci & Benitez, 2023), we carried out two studies to explore and confirm the internal structure and the internal consistency of the scale.

We based the current work on the Social Cognitive Theory (Bandura, 1986, 1999), which highlights the complex mechanisms of mutual influence that occur between the individuals (beliefs, thoughts, expectations, goals, etc.), their behaviors and their environments, a postulate which has also the merit of having been applied to the career field (Lent, 2005, 2008; Lent & Brown, 2013). In this context, agency refers to the individuals' capacity to act intentionally and to exercise control over their own actions and their environment (Bandura, 2001). Thus, the development of a scale for measuring perceived in middle school students has several potential contributions.

From a theoretical standpoint, studying career agency would allow a better knowledge of individual decision-making processes at an early age, but also of the role of agency in predicting future professional results and thus enrich the available theoretical models. From a methodological perspective, although different forms of agency have been measured, very few of them concern career choice among adolescents. Thus, we provide empirical evidence of a scale for measuring

the perceived agency of career choice for adolescents in their final year of middle school adapted to the French language and cultural background in this work.

From an applied perspective, having valid psychometric instruments adapted to the adolescent population would allow career counseling specialists not only to identify the needs for agency development among target people and groups, but also to evaluate the variations while measuring the effectiveness of actions seeking to promote it. Thus, as Rottinghaus et al. (2005, p.135) point out, measuring career agency “may provide important insights regarding clients’ use of adaptive coping methods and indicate areas where interventions may prove beneficial.” All this should promote the realization of the full professional potential of everyone and the creation of meaningful and satisfying careers. This appears particularly appropriate when preparing for the first school orientation transitions, at the end of secondary school in France, where many students ultimately find themselves in a situation of “imposed orientation.”

Theoretical Background: Agency (From Social Cognitive Theory to Social Cognitive Career Theory)

According to Bandura (2009), the human mind is not only reactive to its environment, but also generative, creative, proactive and reflective. As part of the development of the Social Cognitive Theory (SCT) of human behavior (Bandura, 1986, 1999), he proposes a model of reciprocal triadic causality of human agency, based on reciprocal determinism between three large sets of factors (Bandura, 2008, 2009). First, internal personal determinants, such as the feeling of personal efficacy, classically described as an individual's belief in their own ability to succeed in a task. Thus, numerous studies (Bandura, 1977; Lent et al., 1994, 2000; Schwarzer & Jerusalem, 1995), were able to highlight the influence on academic results, career choices and even mental well-being. Second, environmental determinants

(Bandura, 1986), such as socio-economic level, which also influence the individuals’ agency by creating opportunities or obstacles in their career path. Lastly, behavioral determinants, or acting on the surrounding environment and transforming it.

The originality of the model therefore lies in the fact of not considering human functioning as entirely determined by the past and individuals as devoid of any power, nor of making them totally free beings, over whom the contexts of life have no influence. Bandura (2009) also distinguishes four fundamental mechanisms of human agency: intentionality, anticipatory thinking, self-reactiveness and self-reflection. Indeed, exercising agency requires the person to do it deliberately, that is, the main responsible for the action. This proactive commitment occurs at the time of planning but also during the stages of execution of the behavior in question, even if on this occasion the initial intention can be reconsidered, readjusted, or even abandoned. Exercising agency also requires the individual to be able to anticipate their own future, to set objectives, but also to imagine the consequences of the actions envisaged. Finally, agentic behavior implies not only being able to control and regulate one's actions but also demonstrating a certain reflexivity about one's own functioning, whether affective, cognitive or behavioral.

Based on these theoretical propositions, Lent et al. (1994, 2000) developed a Social Cognitive Career Theory (SCCT), aiming to describe the processes involved in the construction of career choices and to understand the influencing factors. In this context, career agency depends on different personal variables (i.e., feelings of personal efficacy, expectations of results, interests, abilities), thereby leading that certain career options will be considered more attractive than others. It can also be reinforced through the implementation and success of actions linked to the achievement of a specific goal (orientation or professional project in particular) or getting support (emotional and

financial in particular). Finally, it can evolve under various societal pressures (cultural, gender, family, economic, etc.) or contextual opportunities (attractive job offers in another professional sector). Considering that self-efficacy beliefs and expectations determine whether a person will engage in an activity, but also the strength and duration of the efforts they will devote to it, and ultimately their success, it is therefore not surprising to note that professional guidance approaches inspired by SCCT, such as the Quebec guidance approach. The emphasis is particularly placed on the development of self-efficacy beliefs of young school children, in matters of academic success or even project development (Canzittu & Demeuze, 2017).

Finally, in the field of work psychology and career counseling, agency related to career choices highlights the active role of individuals in the construction and management of their professional trajectory. It concerns the ability of individuals to make proactive decisions, exercise control over their careers, and actively seek opportunities to achieve their professional goals. However, despite the interest in this concept, there still are few tools intended to evaluate it in adolescents.

Career Agency Measurement

As already pointed out by Mameli et al. (2019, p. 43), "Although the dimension of agency has become increasingly central in international debates on education, the construct maintains a character of elusiveness that makes the question of how to investigate and measure it a relevant one." Based on the observation of a more qualitative than quantitative investigation of the concept in the available literature, these researchers developed and validated their own unidimensional scale, with 7 items and based on a self-assessed measure, with an Italian student population. To develop this scale, they were inspired by the work of Reeve and Tseng (2011), defining agency as an attitude aimed at transforming one's practices through discourse and action. The results of their study on more than 900

students are interesting for several reasons. Not only do they show that academic agency appears to be maximized by satisfactory school experiences, but also how it influences academic success as well as the feeling of personal efficacy in making career decisions. However, its operationalization in the constructed scale remains more related to learning situations (with items such as "I let my teacher know what I need and want" and "I defend my opinions even if they are different from those of my peers") than the construction of the quarry.

In the specific field of career, the available evaluation tools relate more to associated concepts, more or less directly linked by the authors to the work of Bandura or Lent. Among all these concepts, it is the feeling of personal efficacy that has undoubtedly been the most operationalized in different measurement scales around the world. As an example, the Career Decision-Making Self-Efficacy Scale - Short Form (CDMSE-SF) by Betz and Taylor (2012) allows to explore five dimensions related to the Crites' hierarchical model of career maturity (1978): accurate self-assessment, gathering information about the profession, choosing goals, making plans for the future, and solving problems. Psychometric studies carried out on different populations (high school students and students in particular), in different countries, indicate very good consistency of the entire scale, but often less consistency of the five subscales which compose it, pushing researchers to consider this questionnaire as a general measure of self-efficacy in career decisions.

Other scales have also been developed in the career field, part of work relating mainly to vocational indecision or, more recently, to career adaptability. For example, two validated questionnaires, particularly on adolescent populations from different countries, can be mentioned. The Career Decision-Making Difficulties Questionnaire (CDDQ) by Gati, Krausz and Osipow (2014), measures specific barriers and concerns that

may disrupt an individual's career decision-making process. In addition, the Career Adapt-Abilities Scale (CAAS) developed by Savickas and his colleagues (e.g., Savickas & Porfeli, 2012), which assesses the psychosocial resources available to an individual to cope with career transitions using four dimensions: concern, control, curiosity and confidence. While they provide a better understanding of how people make career decisions and engage in career direction, they do not directly or fully assess human agency as defined by Bandura.

To sum up, the review of the literature highlights the lack of tools for assessing career agency adapted to the adolescent population. Even though there are some scales to measure general career agency, we identified a one-dimensional measure of agency for adolescents in the context of learning experience (e.g., Mameli et al., 2019; Reeve & Tseng, 2011). By using the theoretical underpinnings of this specific form of agency (Bandura, 1986; Reeve & Tseng, 2011), we developed a self-rating and one-factor scale to measure career agency specific for “professional orientation experience.”

The present work aimed to develop and validate a scale for measuring perceived career agency on a sample middle school students in France and who are experiencing and preparing themselves for their first career transition either towards general and technological high school or towards technical middle school. To achieve this goal, two studies with different objectives were conducted as part of the present work, and in accordance with current recommendations regarding the development and psychometric validation process (Sireci & Benitez, 2023).

The first study aimed to explore the underlying latent structure of the perceived career agency scale (which was considered as a one-dimension structure), and to examine its internal consistency. The second study aimed to confirm the previously found

one-dimensional structure of the scale and its internal consistency.

Based on Bandura's work (1986), an anticipatory activating instruction was introduced, leading each student to project themselves into the middle school-high school transition and, more particularly, into their path of choice of educational orientation. In accordance with previous studies focusing on the evaluation of agency in a school environment (e.g., Mameli et al., 2019), we propose a unidimensional scale composed of 7 items referring to the Bandura's human agency, such as the abilities to engage, to anticipate, to set goals, to organize, to plan, but also to analyze the results of one's behaviors to feedback appropriately.

METHOD

This section presents information on the different methodological features for both studies, as well as the details of the research protocol with an exploratory (study 1) and confirmatory (study 2) approach aimed to evaluate the psychometric qualities of the perceived agency scale among French adolescents.

Participants

The total sample for both studies consisted of 435 French adolescents from various educational institutions across different regions of France, including the Paris area as well as the northern and southwestern regions. As part of the research protocol, this sample was divided into two sub-samples that respond to the requirements and objectives of each of the two studies. Regarding study 1, the sample consisted of 215 middle school students, of whom 110 were women (51%), 97 were men (45%), and 8 who (4%) did not report their gender. The average age of participants was 14.1 years ($SD = 0.45$). As regards to study 2, 220 middle school students participated, comprising 108 women (49%), 106 men (48%), and 6 participants (3%) who did not answer the gender question.

The average age in study 2 was 14.2 years (SD = 0.49).

Measure

The career agency scale, based on the postulates of socio-cognitive theory (Bandura, 1986) was used in both studies to assess adolescents' perceived ability to proactively plan and make decisions regarding their academic and career trajectories. It is composed of 7 items which refer to the mechanisms underlying academic agency [example item 3: "I am capable to create an action plan (of things to do) to achieve my goals]. Regarding the instructions, participants must respond to each item preceded by the following sentence: "In my path of choice of educational orientation..." The Likert-type response scale used in the measure ranges from 1 (Not at all) to 5 (Very much). The items are presented in Table 1.

Procedure

Both studies took place in France at the end of 2022 and the beginning of 2023.

After obtaining the agreement of the heads of the schools concerned, the pupils' legal guardians received a detailed information note. As part of the research protocol, it was decided to fully anonymize the data of under-age participants after a transitional pseudonymization phase (a decision made together with school principals). For each study, participants completed the questionnaire, supervised by their main teachers (with prior authorization from the school heads). During the exams, in the event of difficulties during completion, students could consult their supervising main teacher.

Ethical Considerations

The ethical protocols for both of two studies were identical. We carried them out in partnership with the heads of participating schools who were notably in charge of informing staff, students and their families of the objectives and methods of the study and

of taking care of consents. We ensured the anonymity and confidentiality of the responses throughout the collection of data, and no compensation, financial or otherwise, was offered. The local university research ethics committee issued a favorable opinion on this research (CER-PN-2024-03-18).

Analytical Strategy

In accordance with international standards for the development, adaptation and validation of psychometric instruments (Sireci & Benitez, 2023), the data analysis strategy of this work is as follows. First, we explored the internal structure of the Perceived Career Agency Scale (study 1). More specifically, study 1 consisted of checking the relevance of the data to carry out a factorial analysis, and then we carried out an exploratory factorial analysis. Second, the structural factor of the scale was tested and confirmed by using a confirmatory factor analysis (study 2). In addition, we assessed the internal consistency of the instrument in both studies. Thus, although pursuing two complementary but different objectives, both studies respond to the objective of evaluating the psychometric qualities of this scale.

As part of the data analysis strategy, we performed descriptive analyzes and reliability analysis using Jamovi software (Version 2.4.12.0) and Statistical Package for Social Sciences (SPSS version 25). We carried out an exploratory and confirmatory factor analysis using Mplus version 8. Given the characteristics of the scale, we used the robust maximum likelihood estimator (MLR estimator on Mplus), which is considered relevant for modeling scales with response options of 5 or more points (Rhemtulla et al., 2012). Regarding the evaluation of the measurement model, several statistical fit indices were considered to examine and evaluate the factorial structure of the scale (i.e., maximum-likelihood chi-square, χ^2 , degrees of freedom, df; comparative fit index, CFI; Tucker-Lewis index, TLI; standardized root mean square residual, SRMR) (Kline, 2023).

RESULTS

We are presenting the structural validity results of the exploratory analysis first, followed by the results of the confirmatory analysis. Lastly, we present the results of the reliability assessment of the scale.

Structural validity

Study 1: Exploring Factorial Structure

We first examined the relevance of the data to carry out a factor analysis. The Kaiser-Meyer-Olkin (KMO) index at 0.88 and Bartlett's test of sphericity with a $p < .00$ allowed us to verify the adequacy of the data and sampling to examine the factorial structure of the scale. Second, an exploratory factor analysis (EFA) was carried out, via Mplus 8.4 (Muthén & Muthén, 2017), to examine the factor structure underlying the proposed measurement tool.

We determined the number of factors and items to be retained via the rule of eigenvalues (Eigenvalues) greater than 1 and the maximum likelihood extraction method (maximum likelihood; MLR indicator on Mplus) (Ferrando et al., 2022; Lloret-Segura et al., 2014).

The EFA allowed us to demonstrate the presence of a 1-factor solution explaining 53.237% of the variance. Table 1 presents the factor loadings of the uni-factor solution, thus indicating that all items show satisfactory levels of factor loading (above 0.59). Furthermore, in accordance with the suggestions of Kline (2023), we evaluated the fit of the identified factor solution. The uni-factorial solution (underlying the career agency scale) demonstrates satisfactory fit indices ($\chi^2(14) = 41.464$; $p < .000$; RMSEA = .09 [.06 – .13]; CFI = .94; TLI = .91; SRMR = .05).

TABLE 1.

1-Factor Model: Exploratory Factor Analysis of the Career Agency Scale for Adolescents.

Items	Factor loading
	Factor 1
Factor 1: Career Agency Among Adolescents	
Item 3: I am capable to create an action plan (of things to do) to achieve my goals	.80
Item 2: I am capable to organize my time, my tasks and all the means I have to achieve my goals	.79
Item 4: I am capable to commit to and persevere in tasks that help me achieve my goals	.79
Item 7: I am capable to plan (foresee) concrete actions to take to achieve my objectives	.76
Item 6: I am capable to adapt my action plans (the things I have to do), if the objectives change or if I am not happy with the results of what I have already obtained	.68
Item 5: I am capable to know if the things I did were effective or not in moving forward with my project	.62
Item 1: I am capable to set my own goals	.59

Note. $n = 215$. Extraction method: Maximum Likelihood Robust.

Study 2: Confirming the Factorial Structure

In accordance with our research goals, we executed a confirmatory factor analysis (CFA) via Mplus 8.4 to verify the measurement model explored in the first study (Muthén & Muthén, 2017) and with the maximum likelihood extraction method (maximum likelihood; MLR estimator on Mplus) (Ferrando et al., 2022; Lloret-Segura et al., 2014). The 1-factor model presents

satisfactory fit indices ($\chi^2(14) = 33.383$; $p < .000$; RMSEA = .08 [.04 – .11]; CFI = .95; TLI = .93; SRMR = .04) and the factor loadings of the items are all greater than 0.66 (Figure 1). The results we obtained therefore indicate that the one-factor solution demonstrates the hypothesized measure of career agency among adolescents.

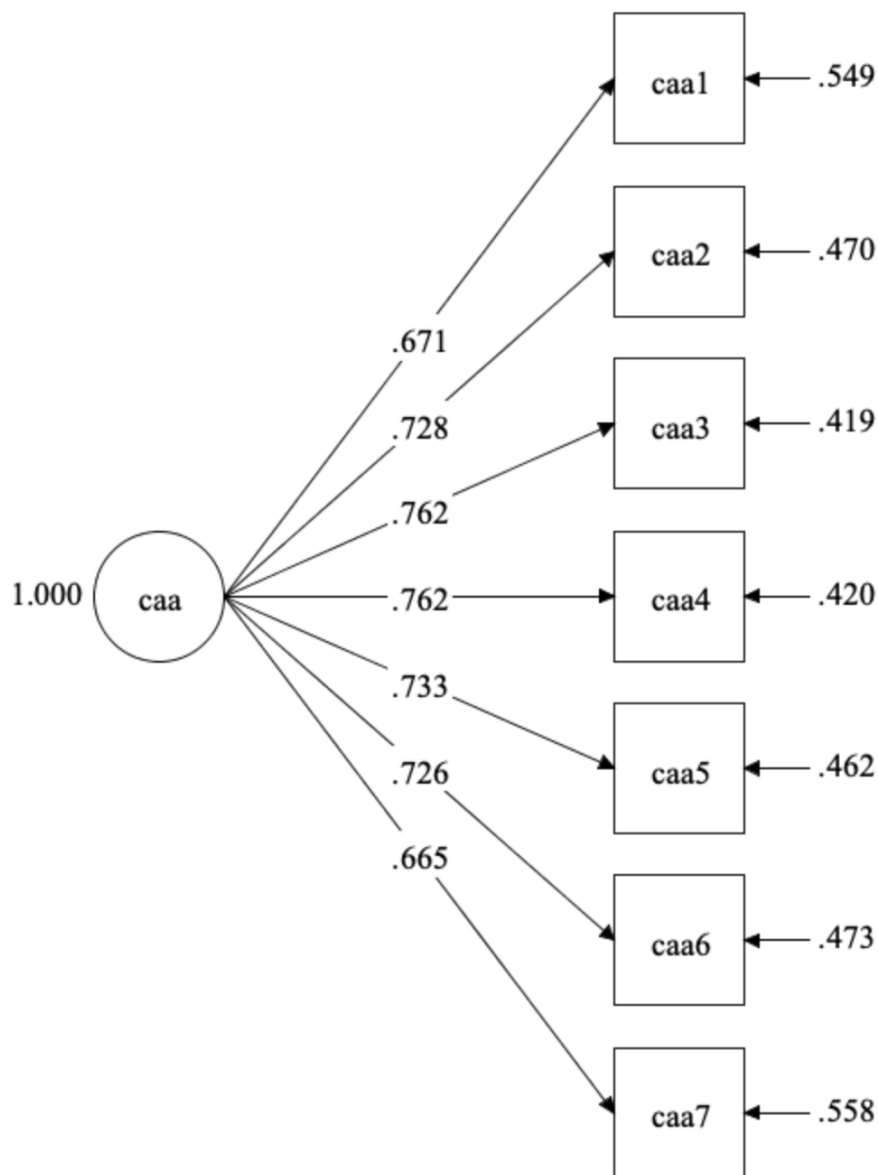


FIGURE 1.
1-Factor Model: Confirmatory Factor Analysis of the Career Agency Scale for Adolescents.

To provide additional evidence for the convergent validity of the Career Agency Scale, we calculated average variance extracted and composite reliability. Regarding the average variance extracted, the coefficient at 0.52 is satisfactory (values above 0.5 are suggested; Bagozzi and Yi, 1988). This demonstrates evidence of the convergent validity of items part of the scale.

Reliability

Concerning reliability, studies 1 and 2 findings showed empirical evidence of high levels of internal consistency of the perceived career agency scale. Regarding study 1, Cronbach's alpha ($\alpha = .88$) and McDonald's omega ($\omega = .89$) demonstrated that the measure has good internal consistency. As regards study 2, McDonald's omega ($\omega = .88$) and Cronbach's

alpha ($\alpha = .88$) coefficients provide evidence of satisfactory levels of internal reliability and consistency.

DISCUSSION

The exploratory study made it possible to identify and evaluate the factor structure underlying the career agency scale. The results of study 1 highlighted a 1-factor solution, which is therefore consistent with the uni-factor measurement model of the measurement tool. The career agency scale thus demonstrates good psychometric qualities (i.e., reliability, validity) to measure the perceived capacity that students must exercise proactive and engaged control over their career choice path school.

The confirmatory study allowed us to verify the measurement model underlying the career agency scale. The results obtained in study 2 demonstrate that the career agency scale demonstrates good psychometric qualities to assess the perception of students (mainly adolescents) regarding their capacity to act intentionally and proactively on their career path choice of educational orientation.

The results revealed a one-factor scale comprising seven items, thereby confirming the one-dimensionality. The reliability and validity indices were found to be conclusive, supporting the scale's robust psychometric properties. These strong psychometric qualities suggest that the instrument is not only suitable for research purposes but also for practical application in supporting adolescents' school and professional transitions.

Thus, from a theoretical point of view, the ability to better assess the role of vocational agency in early career transitions should enrich the available models of young people's vocational adaptability, particularly in terms of the concept of sustainable career development. In a changing world, the idea of being able to pursue one's career with a degree of temporal continuity at any age seems crucial, not least from the point of view

of social justice. In addition, it can be used by practitioners and researchers alike to assess the effectiveness of future interventions aimed at strengthening the agency of this population.

Despite its interest, this research suffers from certain limitations, some of which open interesting research perspectives. First, in addition to the sample size which should be larger, the validation method chosen could be supplemented in the future to make the results more robust. For example, Hambleton et al. (2000), underlines the added value of using the item response model, in view of the several weaknesses of the factor analysis methods classically used in the evaluation of the dimensionality of measures, the main weakness being that these methods presuppose the existence of linear relationships between variables and factors.

Second, we integrated the career agency measurement scale into a broader questionnaire, also measuring psychosocial skills, perceived anxiety, feeling of personal efficacy and even mental well-being. Requiring a long period of concentration for students of this age, we can assume that this test could have generated weariness, loss of concentration, or even approximate completeness in some. On the other hand, unveil an interesting comparison in terms of research perspectives.

Third, as with any self-administered measure, this scale is subject to bias related to social desirability effects, pushing participants to respond in a socially desirable manner rather than in an authentic manner. Techniques to check the validity of responses could be used to mitigate these biases. In addition, the incorporation of the agency measurement scale into the large questionnaire cited above forced us to shorten the number of items as much as possible, thus preventing us from having enough items to be able to measure each theoretically expected dimension. Even if this choice, in line with other studies exploring the measurement of agency in schools (Mameli et al., 2019),

demonstrates satisfactory psychometric results, it can also become a potential methodological issue. Indeed, from a psychometric point of view, each item should represent a single factor, and each dimension of the theoretical model should be represented in the tool, which was not the case here. In the future, we could consider building a longer scale to test a more multidimensional hypothesis of the concept.

Finally, in accordance with Bandura's triadic model, and the proposals of Lent et al. (2000), the scale could include items that assess how adolescents perceive and navigate the expectations and influences of their family, their peers, the educational institution and society in general regarding their career choice. This scale could also consider the temporal dimension of agency in career choice, assessing both short-term planning (e.g., course option choices in high school) and long-term vision (e.g., future career aspirations).

To conclude, this is a preliminary version, which aims to develop a scale for measuring agency on different populations and different contexts in relation to choices, career and support work. The main objective of this study focused on the development of an agency measurement scale. This scale will pave the way for evaluating the effectiveness of interventions aimed at developing agency. The study specifically targets adolescents' career choices, with the goal of improving their mental well-being. Previous research has already established a link between well-being and agency, making this an important area of focus. Once the scale is established, it will be possible to measure more precisely the impact of these interventions on adolescents' mental well-being. Although the validation produced promising results, improvements are needed, particularly regarding the limitations we identified. The rest of the project would therefore aim to continue research in this area, remedying the limitations identified to obtain more convincing results using additional analyses. Ultimately, the research

could lead to international comparisons contributing to a better understanding of the processes and factors involved in building a lifelong career.

Research Ethical Standards

Funding: We certify that the present work did not receive any funds.

Conflicts of Interest: The authors declared no conflicts of interest.

Approval of the Institutional Board for the Protection of Human Beings in Research:

The present research project has received approval from the ethics and research committee of the University of Nanterre (n° CER-PN-2024-03-18).

Informed Consent: As participants were minors, their legal guardians were informed about the study. Given the fully anonymized nature of the data and the minimal risk involved, written informed consent was not required, in compliance with the approved ethical procedures.

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