

THE TRANSITION INTO ADULT LIFE QUESTIONNAIRE OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS - TRAINING PATHS IN THE PORTUGUESE EDUCATIONAL SYSTEM: CONSTRUCTION AND VALIDATION^{1,2}

QUESTIONÁRIO DE TRANSIÇÃO PARA A VIDA ADULTA DOS ALUNOS COM NECESSIDADES EDUCATIVAS ESPECIAIS – PERCURSOS DE FORMAÇÃO NO SISTEMA EDUCATIVO PORTUGUÊS: CONSTRUÇÃO E VALIDAÇÃO

Luís FÂNZERES³

Anabela CRUZ-SANTOS⁴

Sofia SANTOS⁵

ABSTRACT: The transition into adult life (TAL) is an emerging theme in educational research and practice, with few responses to societal challenges arising from the relationship between academic curriculum and the labor market. The evaluation of its quality lacks instruments. Therefore, the aim of this paper was to describe the construction of the TAL questionnaire - training paths built for the purpose to analyze its psychometric properties. The questionnaire was administered at national level to 616 professionals in five dimensions: TAL; Adequations in the Learning Process; Training Paths - Education and Training Courses (ETC); Training Paths - Individual Transition Plan (ITP); TAL in relation to the Labor Market. Reliability for internal consistency has a total Cronbach's alpha of .94. Exploratory factor analysis demonstrated the suitability of the model, explaining 44.02% of the total variance. The questionnaire seems to be a valid tool for collecting information about TAL, and students' career prospects. The school does not seem to have the ideal conditions, and a greater articulation with the companies is essential. The need for more specialized resources training required the construction of an organizational model, supported by the articulation and complementarity in the process, role and responsibilities of the intervening actors.

KEYWORDS: Special Educational Needs. Transition to Adult Life - Special Educational Needs. TAL Questionnaire - Validation.

RESUMO: A transição para a vida adulta (TVA) é um tema emergente na investigação e prática educativa, com poucas respostas aos desafios sociais decorrentes da relação entre currículo académico e mercado laboral. A avaliação da sua qualidade carece de instrumentos. Assim sendo, o objetivo deste artigo foi descrever a construção do questionário TVA – percursos de formação construído para o efeito e analisar as suas propriedades psicométricas. O questionário foi aplicado, no âmbito nacional, a 616 profissionais em cinco dimensões: TVA; Adequações no Processo de Aprendizagem; Percursos de formação - Cursos de Educação e Formação (CEF); Percursos de formação - Plano Individual de Transição (PIT); e TVA em relação ao Mercado de Trabalho. A fiabilidade pela consistência interna apresenta um alpha de Cronbach total de .94. A análise fatorial exploratória demonstrou a adequabilidade do modelo, explicando 44,02% da variância total. O questionário parece ser um instrumento válido para recolher informação sobre a TVA e das possibilidades dos alunos para uma carreira profissional. A Escola parece não possuir as condições ideais, sendo essencial uma maior articulação com as empresas. A necessidade de mais formação dos recursos especializados exigiu a construção de um modelo organizativo, suportado na articulação e na complementaridade no processo, no papel e nas responsabilidades dos intervenientes.

PALAVRAS-CHAVE: Necessidades Educativas Especiais. Transição para a Vida Adulta - Necessidades Educativas Especiais. Questionário TVA – Validação.

¹ <https://doi.org/10.1590/1980-54702020v26e0158>

² This work is funded by CIEd – Research Centre on Education, Institute of Education, University of Minho, projects UIDB/01661/2020 and UIDP/01661/2020, through national funds of FCT/MCTES-PT

³ Education Institute/CIEd - University of Minho, Braga/Portugal. E-mail: luisfanzeres@gmail.com. ORCID: <https://orcid.org/0000-0003-3790-206X>

⁴ Education Institute/CIEd - University of Minho, Braga/Portugal. E-mail: acs@ie.uminho.pt. ORCID: <https://orcid.org/0000-0002-9985-8466>

⁵ Research and Development Unit in Education and Training (*Unidade de Investigação e Desenvolvimento em Educação e Formação* - UIDEF) - Education Institute, Faculty of Human Motricity, University of Lisbon, Lisbon/Portugal. E-mail: sofiasantos@fmh.ulisboa.pt. ORCID: <https://orcid.org/0000-0002-6654-564X>



1 INTRODUCTION

The Transition to Adult Life (TAL) process of students with Special Educational Needs (SEN) is of particular relevance in the current Portuguese educational scenario, seeking to respond to their needs regarding the promotion of learning aimed at a quality adult life.

The national application of the TAL questionnaire for students with Special Educational Needs: Training Paths in the Portuguese education system is an important step in gathering important data and information regarding the situation in Portugal. The research developed in this study has provided an important basis for further studies, which seek to provide continuity, expanding the sample or taking into account other variables, but, above all, studies that seek to contribute to a better understanding of the phenomenon that it is the training and professional insertion of people with SEN.

In the current Portuguese educational system, the transition process is evident as an emerging measure, verifying the need to understand the entire process related to the systematization and organization of the TAL process of students with SEN (Santos, 2013). This issue, although not recent, remains current and the newest national norm, in the scope of Inclusive Education, Decree-Law no. 54/2018, reiterates the diversity of characteristics of the students and the respective responses for access to the success and the acquisition of an educational and training profile for social participation, seeking to meet the goals of the 2030 Agenda for Sustainable Development of the United Nations (Akkari, 2017).

TAL is of particular relevance in the educational, international and national scenario, given the growing number of students attending the 3rd cycle and secondary education, seeking to respond to the needs related to the promotion of learning aimed at a quality adult life, as well as integration into the labor market. TAL facilitation should then guide the development of the entire educational program (Kohler, 1996, 1998; Kohler & Field, 2003), covering challenges, possibilities and issues faced by young people with SEN, so particular attention should be paid to the sharing on training, qualification and employment of these students (European Agency for Development in Special Needs Education [EADSNE], 2002).

Simões and Santos (2017) point out that one of the most complex phases, within the scope of compulsory and universal education, along the academic path, is the TAL phase and the consequent insertion in the labor market, which has been demanding a new positioning in relation to students with SEN, betting on reflection on cognitive academic content vs. functional and meaningful content, diverse and appropriate opportunities and responses/support and student empowerment (Santos, 2019), for equal opportunities, inclusion, participation and quality of life for them. Despite the demand for quality of the training offer due to the profile of students (Decree-Law no. 3/2008; Decree-Law no. 54/2018), there is still a shortage of studies at the national level in this area (Santos, 2013).

TAL must be assumed as a continuous process of assuming new roles, responsibilities and determinant functions for the transition into adulthood, representing the process of professional training and consequent insertion in the labor market, a fundamental element for the citizenship of the person with SEN and his/her family (Dong, Fabian, & Luecking, 2016). This process needs to be guided in the most appropriate way, reinforcing the ends of a successful transition process leading to autonomy and self-determination (EADSNE, 2002).

Within the scope of Education and Training of students with SEN, there are training options that constitute valuable proposals in the TAL process, with the Education and Training Courses (ETC) having emerged in Portugal for students with less support needs, and Individual Transition Plans (ITP) for students with a higher level of severity included in the Individual Education Plan (IEP) measure, obtaining, at the end of the path, a certificate of vocational skills (Fânzeres, Cruz-Santos, & Santos, 2016a). To the authors, these courses aim to provide a set of differentiated offers that allow the fulfillment of compulsory education and the obtaining of professional qualifications, which, in the cases of ETC, are duly certified according to the legislation. However, there is still a scarcity of evidence on the perceptions of the people who intervene throughout this process, which are fundamental to the certified professional practice of all students, including students with SEN.

The monitoring and justification of (good) practices requires valid and reliable evaluation processes, which, so far, appear to be non-existent in Portugal.

2 METHOD

In this section, we discuss how the selection of participants took place, the instruments used in the research and the procedures considered.

2.1 SAMPLE

The sample was constructed according to the greatest number of randomness criteria, looking for an adequate degree of heterogeneity, contacting, for this purpose, the maximum number of professionals with experience at the TAL level of students with SEN (schools and institutions).

For the selection of participants, it was established, as inclusion criteria, to be teachers of the 2nd and 3rd cycle and secondary education, with some type of experience with the TAL of students with SEN, as well as professionals working on the same area in institutions and other types of educational institutions. The number of participants was determined by the calculation formula of the Research Systems software⁶. Cluster Sampling, Nomenclature of Territorial Units for Statistics (NUTS) was chosen based on a European classification created by the Statistical Office of the European Union (Eurostat), in 2003, with an updated version in 2013 (European Union [EU], 2014), using natural groupings of elements of the population, in which each element belongs to a single group (Hill & Hill, 2008); in this case, teachers and other professionals involved in the TAL of students with SEN.

The ages of the participants varied between 20 and 50 years old, with professional experience between 5 and 25 years of career, with the vast majority (65%) holding a teaching degree, exercising mostly functions in the current year as teachers of Special Education (44.3%), mostly in public education institutions (88.3%). Regarding the geographic distribution of the participants, they come from all districts of the country (20), noting that Braga was the district with the highest participation in the survey with 18%, followed by Lisbon with 16.2%. With regard to Professional Experience versus training context, it can be seen that, in relation to

⁶ Retrieved from <http://www.surveysystem.com/sscalc.htm>.

Experience in an exclusively academic context, Specific Learning Difficulties (SpLD) are the most common problem ($n = 399$), representing 66.4% , and, regarding the experience in the context of Professional Training, the Intellectual and Developmental Disabilities (IDD) have the highest number ($n = 353$; 57.3%). Regarding the training areas offered by the educational institutions where the participants work, and, according to the training offer presented, Hospitality and catering courses, Floriculture/Gardening are the most disseminated offers with, respectively, ($n = 218$; 35.4%) and ($n = 168$; 27.3%) consent.

2.2 INSTRUMENT

The questionnaire “Transition for Adulthood of students with Special Educational Needs: Training paths in the Portuguese education system” (TAL:TP) (Fânzeres, Cruz-Santos, & Santos, 2013) was prepared based on an extensive review of national and international literature. Its final version consists of two parts: the first, referring to the participants’ sociodemographic data; and the second, dedicated to the questionnaire itself. The questionnaire consists of 110 items in total, which are organized into five dimensions: 1) TAL of students with SEN; 2) Adaptations in the Learning Process; 3 - ETC Training paths; 4 - ITP Training paths; and 5 - TAL in relation to the Labor Market.

Each dimension encompasses several four-point Likert scale questions (numbered 1 to 4, explained in the preamble to the questionnaire, e.g.: **1** - Strongly agree; **2** - Agree; **3** - Disagree; **4** - Strongly disagree), or closed questions (yes/no), having, at the end, an open question for a more specific answer according to the intrinsic theme of each one. The interpretation of the data and its analysis allows the identification of the perceptions of the professionals (teachers, technicians and others) about the answers/training offer that schools and institutions use in the context of the TAL process of young people with SEN in the Portuguese educational system.

2.3 PROCEDURES

Throughout the study, all ethical principles and requirements inherent to such an investigation were considered. In this sense, the project was submitted to the Ethics Council for Research of the Faculty of Human Motricity of the University of Lisbon (*Faculdade de Motricidade Humana da Universidade de Lisboa* - CEFMH) for consideration, which was approved by Opinion no. 22/2015, as well as the Ethical Commitment was signed, and through which we were committed to maintaining the ethical attitude that morality requires and the compliance with the legislation in force throughout the investigation process. Cumulatively, the participants were informed, through their own document – the Free and Informed Consent -, with important information regarding their participation in the study, explaining the most important aspects, guaranteeing the confidentiality and anonymity of the data, as well as the withdrawal of the study at any time. The application of the final version of the TAL:TP questionnaire was sent by email, to teachers and professionals, explaining the purpose and procedures of the study, requesting collaboration in the dissemination and completion of the survey.

3 RESULTS

The analysis of the psychometric properties of any instrument must involve content validity or representativeness of items, criterion validity (not applied in this study due to the lack of other instruments for comparison) and construct validity (International Test Commission [ITC], 2017; Taherdoost, 2016). In this sense, and after the establishment of the first version, a set of methodological procedures was carried out to guarantee its validity.

The analysis of the content validity was initiated in a first phase by the Thinking aloud segment, having been asked to three experts to rate the relevance, clarity, ambiguity and simplicity of the questionnaire items. These experts were selected due to their qualification (one with a Master's degree and several years of experience in the area of TAL and two PhDs in the field of developmental disorders, TAL and intervention methodologies). After the consensus acquired, several focus groups (Phase 2) were carried out with teachers, technicians and monitors ($n = 40$), who develop their teaching/professional activity within the scope of the training courses of students with SEN, to detect the existence of poorly constructed items and verify the existence of ambiguity of content that could cause doubts to the participants suggesting modifications (Almeida & Freire, 2008), in the sense of being able to accept them as indisputable (empirically true), with scientific rigor and consistent with the knowledge established (Mertens, 2014).

In this way, the final version was applied (Phase 3) to professionals (teachers/ technicians/monitors and others) who intervene in TAL at the level of Education Training (ETC) and Special Education Courses and technicians responsible for implementing the Individual Transition Plans (ITP), having been applied only once, to all participants of the sample. Reliability was analyzed for internal consistency (Table 1) and calculated based on Cronbach's alpha (α). Through the results obtained, it was possible to verify high values of internal consistency, highlighting the total value (.94), and with highly significant results [$X^2 = 57.285$, $p \leq 0.001$].

Dimensions 1 and 5 are also at an excellent level. Only dimensions 3 and 4 have values below .80. Despite the importance of reliability, this measure is not sufficient by itself, and must be combined with the analysis of construct validity (Taherdoost, 2016), that is, the relationship between construct and its operationalization.

Dimension	α	no. of items	n	If item excluded
Dimension 1: TAL	.92	33	616	
Dimension 2: Learning process adaptations	.75	6	616	
Dimension 3: ETC training paths	.78	18	298	.79
Dimension 4: ITP training paths	.89	26	199	
Dimension 5: TAL in relation to the Labor Market	.90	27	616	
Total	.94	110	616	

Table 1. Values of Internal Consistency of the five Dimensions of the Questionnaire.
Source: Elaborated by the authors.

In this sense, the correlation between the various dimensions of the questionnaire (Table 2) was analyzed through Pearson's correlation coefficient, the value of which, if less than .40, indicates weak correlations; between .40 and .60, moderate correlations; between .70 and .89, high correlations; and if higher than .90, very strong correlations (Pestana & Gageiro, 2014).

Variant	M±DP	DIM1	DIM2	DIM3	DIM4	DIM5
Dimension 1: TAL	3.60±.30	1	--	--	--	--
Dimension 2: Learning process adaptations	3.04±.28	.29**	1	--	--	--
Dimension 3: ETC training paths	3.30±.45	.24**	.15**	1	--	--
Dimension 4: ITP training paths	3.43±.30	.32**	.15**	.31**	1	--
Dimension 5: TAL in relation to the Labor Market	3.51±.30	.48**	.31**	.30**	.53**	1

Table 2. Pearson's correlation coefficients in the five dimensions of the questionnaire.

* $p < .01$; ** $p < .05$

Source: Elaborated by the authors.

The overall analysis of the correlation matrices of the 1-TAL dimension of students with SEN reveals that most associations are positive with significance levels of ($p < .01$ and $< .05$) with the majority showing a weak correlation ($r < .40$), as expected. The moderate correlations between dimensions 1 and 5 as well as 4 and 5 stand out.

Still within the scope of construct validity, an exploratory factor analysis (EFA) was carried out to analyze the dependence of dimensions and their interrelationship, identifying factors and verifying the dimensionality of the questionnaire (Marôco, 2007). EFA (Table 3) involved the Maximum Likelihood Estimation method with varimax orthogonal rotation, to identify, through interrelations, factors or dimensions that may have their own meaning and to determine the dimensional structure of the questionnaire (Araújo, Costa, & Almeida, 2014). EFA allows the identification of the final dimensions and the respective items with theoretical and empirical weight (Matsunaga, 2010) in the TAL process (Table 3).

Items	Factors				h ²
	I	II	III	IV	
2.2 a) Improvement of specialized resources.	.57				.35
2.2 b) More support offer	.60				.37
2.2 d) School Community receptivity.	.59				.45
2.3.1 a) Involvement of student and parents.	.68				.47
2.3.1 c) Clear educational strategies (content, active students, decision).	.57				.41
2.3.1 d) Profile Skills practical experiences.	.63				.45
2.3.1 e) Open options and clear information (job opportunities, financial independence).	.63				.46
2.3.2 a) Existence of a support network (ensure cooperation).	.61				.41
2.3.2 b) Explicit definition of tasks.	.64				.44
2.3.2 c) Strengthen vocational guidance services.	.47				.29
2.3.2 d) Complementary training.	.62				.45
2.3.2 e) Involvement of employers and employment organizations.	.59				.40
2.3.3 a) Building networks (social and professional).	.71				.53
2.3.3 b) Define creative measures (strategies to overcome).	.69				

2.3.3 c) Increase the dual system (combine theory and practice).	.69	.51
2.3.3 d) Flexible organization and training measures (preparatory years, vocational training before employment ...).	.48	.29
2.3.3 e) Improve communication in the sector: the labor market at school.	.64	.46
2.3.3 f) Monitoring: after moving to the world of work.	.62	.42
2.3.3 g) Support measures: personal, material, financial and technical resources.	.57	.38
2.3.4 b) Adequate guidance.	.55	.40
2.3.4 c) Flexible support.	.53	.35
2.3.4 d) Reference/Support Person (transition process).	.47	.37
2.3.4 e) Collaboration of families.	.59	.47
2.3.4 f) Monitoring.	.64	.50
3.1 b) Aspirations and desires of the young.	.64	.46
4.3 d) The training offers correspond to the needs of these young people during the transition to the labor market.		.32 .33
4.3 e) Inclusion of young people with SEN in the ETC.		
4.3 g) Enable further studies.		
4.3 h) With a diploma but with difficulties in finding a stable job.		.48 .37
4.3 i) Students' expectations about these courses are realized.		.34 .32
4.4 d) Need to ensure equal opportunities with regard to gender, culture and geographical location.		.44 .30
4.5.1a) It is closely related to the Individual Educational Plan.	.44	.30
4.5.1 b) Focus on issues related to employment and adult life.	.43	.44
4.5.1 c) Includes tools and methods for the adequate TAL.	.36	.49
4.5.1 d) Ensures equal opportunities (gender, socio-cultural level and geographical location).		.78 .67
4.5.1 e) Ensures a fair evaluation process.		.75 .59
4.5.1 f) Promotes the post-school transition to the exercise of a professional activity with adequate professional insertion.		.75 .59
4.5.1 g) Prepared 2-3 years before the end of compulsory education.		.72 .53
4.5.1 h) Must guarantee an evaluation process, through a professional designated for the purpose.	.36	.30
4.5.1 j) The student as an active part in his/her training process.	.64	.43
4.5.1 k) It must foster professional and attitudinal skills that facilitate his/her decision making.	.68	.49
4.5.2 a) Data collected in the preparatory phase of TAL should reproduce expectations, motivation, desires and abilities of the young person and family.		.72 .53
4.5.2 c) Training options based on interests, abilities and professional opportunities.	.69	.55
4.5.2 d) It must foster professional and attitudinal skills that facilitate his/her decision making.	.67	.52
4.5.2 e) The student as an active part in his/her training process.	.74	.56
4.5.2.1 a) Social skills for family and community insertion.	.63	.46
4.5.2.1 b) Competence to exercise an occupational activity.	.75	.61
4.5.2.1 c) Competence to exercise a professional activity.	.53	.31
4.5.3 a) Goals to be achieved and defined dates.	.74	.57
4.5.3 b) Specific actions to be taken to achieve these goals.	.77	.62
4.5.3 c) Identification of intervening actors, their roles and responsibilities.	.72	.60
4.5.3 d) Objectives, contents, strategies and resources vs. defined areas.	.63	.44
4.5.3 e) Level of articulation between these areas.	.66	.47
4.5.3 f) Protocols with institutions and/or companies.		.50 .30
4.5.3 g) Criteria, instruments, intervening actors and moments of evaluation.		.50 .35

5.1 b) The professional certification of students with SEN.	.60	.38
5.1 c) A process must be initiated at the School.	.50	.35
5.1d) Sensitizing the local business tissue.	.60	.38
5.1 e) Collaboration of families.	.63	.45
5.2 a) Adequate professional training.	.63	.45
5.2 b) Articulation between the school and employers.	.58	.39
5.2 c) Create local network with partners (school, employers, families...).	.66	.55
5.2 e) Dissemination of innovative projects at a local level.	.70	.54
5.2 f) Reinforce support mechanisms for unemployed youth and for their first job to enter the labor market.	.66	.49
5.2 g) Create protective labor legislation for young workers, promoting the rapid transition to safer contractual models.	.53	.39
5.3 a) Increases the chances of the young person getting a sustainable job.	.60	.42
5.3 b) Compares the interests, desires, motivations, competences, attitudes and capacities of the young person with the demands of the profession.	.60	.53
5.3 c) Provides a successful situation for young people and employers.	.60	.44
5.3 d) Provides a clear analysis of the young person's possibilities and a consequent professional career plan.	.75	.60
5.3 e) Focus on transition issues on employment and adult life.	.71	.53
5.3 f) Enables greater collaboration by the local community.	.81	.67
5.4 a) Prepared two or three years before the end of compulsory education.	.67	.54
5.4 b) Focus on transitional issues on employment and adult life.	.60	.50
5.4 c) Includes tools and methods for an appropriate transition for young people.	.46	.31
5.4 d) Need to ensure equal opportunities with regard to gender, culture and geographical location.	.58	.51
5.4 e) It must guarantee an evaluation process, through a multidisciplinary team designated for the purpose.	.70	.56
5.4 f) The student's training options must be based on interests, abilities and professional opportunities.	.58	.36
5.4 g) It should foster professional and attitudinal skills that facilitate his/her decision making.	.50	.44

Table 3. Factor Weights of Items.

Source: Elaborated by the authors.

4 DISCUSSION AND RESULTS

In the first phase, and due to the lack of instruments that allow the collection of information on the perceptions of the actors in relation to the TAL process, in Portugal, a questionnaire was elaborated for this purpose, and its psychometric properties were analyzed (ITC, 2017; Taherdoost, 2016). Of the three types of recommended validity - content, criterion and construct validity, only a criterial analysis was not carried out, given the lack of other instruments in the country, for a possible comparison and correlation.

Content validity, considered as one of the first fundamental steps for the validation of an instrument, analyzed the representativeness of the selected items. For this purpose, we opted for the dual approach provided for in the literature: one of a theoretical character, which implied an extensive analysis of the literature; and a more empirical one, which involved expert reviews and focus groups. Thus, and in the first Phase 3, experts analyzed the questionnaire (items and dimensions), classifying each item according to its relevance, simplicity, clarity and

ambiguity. In addition, they also judged on the relevance of the items in each of the dimensions. These experts were selected for their expertise in the area of Special/Inclusive Education, also including the TAL process, and within the scope of intervention methodologies. After the consensus, a preliminary version was established and submitted to the pilot test with the scrutiny of other experts, with effective practice and responsibilities in the TAL process, which, in addition to re-analyzing the relevance and representativeness of the items, also made comments and observations, with suggestions on several reformulations.

According to the opinion of some experts, in the items related to the questions “3.1.1 *Personalized pedagogical support*”; “3.1.2 - *Individual Curricular Adjustments*”; “3.1.3 *Adjustments in the evaluation process*”; “3.1.4 *Individual Education Plan? (teachers/technicians who teach IEPs)*”, the type of answer was changed, since the educational measures are covered in the normative, so the experts found an answer (yes/no) more assertive, taking into account their professional experience in relation to the specificity of the type of training offered. The quotation of items using a 4-point Likert scale was selected in an attempt to avoid the tendency towards neutrality/midpoint (Lozano, García-Cueto, & Muñiz, 2008). The authors state that, for the purposes of validity and reliability, the optimum number of alternatives is between 4 and 7. After the application of the pilot test, and subsequent adjustment, the final version of the questionnaires was prepared and, subsequently, applied.

The reliability, by analyzing the internal consistency of the items in each dimension, seems to have been confirmed, noting that the values obtained (greater than .70) point to acceptable to excellent levels (Nunnally, 1976). As it turned out, the dimensions with the best indexes were TAL (initial dimension 1) and TAL and the relationship with the labor market (initial dimension 5). The values, for each dimension of the survey, are presented as close to excellent (Marôco, 2007), varying between .89 (dimension 4) and .92 (TAL); and dimensions 2 and 3 have an alpha between .70 and .80, which, according to the same author, can be considered reasonable. It should be noted that, in Dimensions 3 and 4, the value of n is different, since, according to their professional experience, some respond only to their experience of ETC ($n = 298$), while others answered taking into account their experience with students who were implemented a ITP ($n = 199$), consisting of important sample extracts, since they directly intervene in the training process of these students. In dimensions 2, 4 and 5, the internal consistency does not improve with the exclusion of any item.

The construct validity of the questionnaire was analyzed using Pearson's correlation coefficients between the five initial dimensions and the EFA to examine the factorial structure of the questionnaire. Pearson's values found tend to lean towards weak significant correlations ($r < .35$), as would be expected, given the selected items, despite being associated with the TAL process, cover different stages of the process not evaluating the same content (Marôco, 2007; Pestana & Gageiro, 2014). In addition, there was a special attention to the selection of items and their correspondence with the dimensions.

However, two moderate correlations, also significant, stand out between dimension 5 (*TAL and relationship with the Labor Market*) and dimensions 1 (TAL) and 4 (*ITP Training Paths*), possibly resulting from the relationship between the TAL process and the need to find “paths” for students to take advantage of ITP, aiming at their integration into the labor

market. The highest values were found in the items “*Flexible organization and training measures (preparatory years, vocational training before employment...)*” and “*Collaboration of the local community*”, given the relevance that curriculum flexibility, transparency and coherence in options, and partnership work take over throughout the TAL process.

The lowest values were found in dimension 2 (*Adaptations of the learning process*) and dimensions 3 (*ETC Training Paths*) and 4 (*ITP Training Paths*), specifically between the items “*Improvement of specialized resources*” and item “*The School has the ideal conditions*”. In dimensions 3 and 4 (*ETC and ITP Training Paths*, respectively), most of the correlations ($p < .05$), between the items, are weak, assuming the need for a reorganization of the academic-functional content, greater flexibility in the processes and objectives to be met as a possible justification. In addition, there is a need for greater knowledge about the characteristics inherent to students with SEN and the training paths on the part of the direct intervening actors.

EFA then established the factorial structure of the questionnaire, pointing out the existence of four factors that seem to contribute to the valid and reliable evaluation of the professionals’ perceptions regarding the TAL process. Factor 1) *Transition to Adult Life for Students with SEN* explains 21.3% of the total variance. Regarding the role of the School in TAL for students with SEN, the percentage distribution of this factor illustrates the relevance that respondents give to the Participation and Involvement of all intervening actors in the process, namely students and parents (78.4% and 68.8%, respectively), meeting the most recent educational norms (Decree-Law no. 3/2008; Decree-Law no. 54/2018). To Dakuzaku (2010), TAL intends to provide young people with vocational skills that lead them to success in the labor market, which can and should be worked on effectively, through direct experiences in real and working contexts, during their schooling (e.g.: curriculum of education and training courses as well as professional courses, through training in the workplace), with partnership and coherence between all employees (school and community) being essential.

In Factor 2) *Training Paths (ITP)*, which explains 9.1% of the variance, the importance of ITP in the Insertion in the Labor Market is emphasized, with 50.5% of respondents considering that the TAL process of students with ITP needs to be prepared in a timely manner, preferably two or three years before the end of compulsory education (Decree-Law no. 54/2018), guaranteeing equal opportunities with regard to gender, culture and geographic location. It should be noted, however, that the time period for the implementation of the TAL process does not seem to be yet consensual, with the need to reconsider the possibility of earlier paths (Santos, 2019). ITP training paths should foster professional and attitudinal skills that facilitate decision making, and the student’s training options must be based on interests, skills and professional opportunities as well as implemented in a real context. The ITP should include “*contents conducive to the student’s personal and social autonomy and give priority to the development of activities of a functional nature centered on life contexts, communication and the organization of the transition process to post-school life*” (point 3 of the article includes content conducive to the student’s personal and social autonomy and gives priority to the development of activities of a functional nature centered on life contexts, communication and the organization of the transition to post-school life - article 21 of Decree-Law no. 3/2008).

Factor 3 - *TAL and Insertion in the Labor Market* explains 8.4% of the total variance, and, according to the responses of the participants (59.1%), the TAL process increases the chances of young people getting a job in a more structured manner, since, for 56.5% of the participants, evaluates interests, desires, motivations and the adequacy of the young person's skills, attitudes and abilities to the requirements of the profession, including tools and methods that certify an appropriate transition and playing a fundamental role in post-school life (Kohler & Field, 2003).

Factor 4 - *ETC Training Paths* explains 5.1% of the variance, in which 69.2% of the participants stressed the encouragement of this type of training path as the most important aspect, with regard to the continuation of studies and the consequent acquisition and development of professional skills.

In general, in relation to training offers, ETC and ITP training paths are considered to be effective offers, and of particular importance for TAL, since the education and training system in Portugal is based on a set of principles which aim to facilitate and ensure the right to education and training and guarantee equal opportunities in school access and success (Guideline Law of the Educational System [*Lei de Bases do Sistema Educativo* - LBSE], 2005). However, the ETC seem to be more oriented towards students with a lower level of severity, despite agreeing with this measure for everyone, as it allows the continuation of studies. In addition, they present themselves as an opportunity for young people to be able to complete compulsory education, through a flexible course tailored to their interests, or to be able to pursue studies or training that allows them a qualified entry into the world of work (Order no. 3863/2014).

5 CONCLUSIONS

The School, as a catalyst for the whole TAL process, should promote and encourage, in all its students, the realization of their human potential and educate them as responsible and intervening citizens, making vocational and professional development one of the first priorities in the construction of the training process of students with SEN (Santos et al., 2019). It is essential to implement strategies articulated with existing resources, in a dynamic methodology, covering a diversity of educational responses made available by the school, based on the students' choices and proficiencies, on the opinion of families and on community opportunities (Fânzeres, Cruz-Santos, & Santos, 2016b).

This paper presented the first valid and reliable questionnaire in Portugal to evaluate the perceptions of the main intervening actor in the TAL process about the post-school transition process, allowing the acquisition of relevant information that can be used for different educational paths and according to the characteristics of each student. Thus, it seeks to contribute to the identification of the training processes for students with SEN within the scope of TAL, as well as the understanding of the perceptions of the agents involved, which can help to identify facilitators and barriers, promoting a reflection for more appropriate measures.

The application of the questionnaire at the national level and with a more representative and significant sample of all intervening actors, including the students themselves and their families, will allow for further in-depth analyzes, as well as the identification of

predictors for a good transition. Some of the recommendations include: a) the need for the enactment of legislative diplomas with incentives for the insertion of these students into the labor market after the conclusion of their TAL process (e.g.: dissemination of legislation to better understand the local business network, making employers (in general) aware of the abilities of students with SEN), and of the school “coming” to the community and vice-versa, through more partnerships and more protocols; b) creation of a local network with all partners (School, University, employers, families, municipalities, employability observatory), to ensure concrete measures for the implementation of existing legislation and its monitoring; and c) the need to rebalance the training of teachers (and school leaders) at the level of initial and specialized training in the area of post-school transition in conjunction with Higher Education for a structured combination of activities according to the Functionality Profile such as professional training, job training in the workplace, including supported employment schemes and independent living in the community. All of these responses presuppose the promotion of equal opportunities and an adequate preparation for professional life and for a transition from school to post-school life.

REFERENCES

- Akkari, A. (2017). A agenda internacional para educação 2030: consenso “frágil” ou instrumento de mobilização dos atores da educação no século XXI?. *Revista Diálogo Educacional*, 17(53), 937-958. DOI: <http://dx.doi.org/10.7213/1981-416X.17.053.AO11>
- Almeida, L., & Freire, T. (2008). *Metodologia da investigação em psicologia da educação*. Braga: Psiquilibrios.
- Araújo, A., Costa, A., & Almeida, L. (2014). Questionário de Percepções Académicas – Expectativas: Contributos para a sua validação interna e externa. *Revista E-PSI* (4)1, 156-178.
- Dakuzaku, R. (2010). Mudanças tecnológicas e organizacionais e a inserção da pessoa com deficiência no mercado de trabalho. *Cadernos de Terapia Ocupacional da UFSCar*, 5(1), 17-32.
- Decree-Law no. 3/2008*. Ministério da Educação. Diário da República, 1.ª série - n.º 4 - 7 de janeiro de 2008, 154-164.
- Decree-Law no. 54/2018*. Regime Jurídico da Educação Inclusiva. Diário da República, 1.ª série - n.º 129 - 6 julho 2018, 2918-2928.
- Dong, S., Fabian, E., & Luecking, R. G. (2016). Impacts of School Structural Factors and Student Factors on Employment Outcomes for Youth with Disabilities in Transition: A Secondary Data Analysis. *Rehabilitation Counseling Bulletin*, 59(4), 224–234. DOI: <https://doi.org/10.1177%2F0034355215595515>
- European Agency for Development in Special Needs Education (2002). *Transição da escola para o emprego: Principais problemas, questões e opções enfrentadas pelos alunos com necessidades educativas especiais em 16 países europeus. Relatório Síntese*. Retrieved on March 30, 2020 from <http://books.google.pt/books?id=9rgkQwAACAAJ>
- European Union (2014). *Programa operacional competitividade e internacionalização*. COMPETE 2020. Retrieved on March 30, 2020 from <https://www.compete2020.gov.pt/>

- Fânzeres, L., Cruz-Santos, A., & Santos, S. (2013). *Transição para a vida adulta de alunos com necessidades educativas especiais: Percursos de formação no sistema educativo português*. Questionário não publicado, Instituto de Educação, Universidade do Minho, Braga, Portugal.
- Fânzeres, L., Cruz-Santos, A., & Santos, S. (2016a). O processo de transição para a vida adulta dos jovens com NEE em Portugal. *Revista AMAzônica*, 9(2), 32-56.
- Fânzeres, L., Cruz-Santos, A., & Santos, S. (2016b). Transição para a vida adulta dos jovens com NEE: Perceções dos profissionais. *Journal of Research in Special Educational Needs* 16(1), 1050-1054. DOI: 10.1111/1471-3802.12133
- Hill, M. M., & Hill, A. (2008). *Investigação por questionário*. Lisboa: Sílabo.
- International Test Commission (2017). *The ITC Guidelines for Translating and Adapting Tests* (2nd edition). Retrieved on March 30, 2020 from www.InTestCom.org
- Kohler, P. (1996). Preparing youths with disabilities for future challenges: A taxonomy for transition programming. In P. Kohler (Ed.), *Taxonomy for Transition Programming: Linking, Research and Practice* (pp. 1-62). Champaign, IL: University of Illinois.
- Kohler, P. (1998). Implementing a transition perspective of education: A comprehensive approach to planning and delivering secondary education and transition services. In F. R. Rusch, & J. Chadsey (Eds.). *High School and Beyond: Transition from School to Work* (pp. 179-205). Belmont, CA: Wadsworth.
- Kohler, P., & Field, S. (2003). Transition-focused education foundation for the future. *The Journal of Special Education*, 37(3), 174-183. DOI: 1.1177/00224669030370030701
- Lei de Bases do Sistema Educativo* (2005). Diário da República, 1.^a série-A - n.º 166 -30 de agosto de 2005, 5122-5138.
- Lozano, L., García-Cueto, E., & Muñoz, J. (2008). Effect of the number of response categories on the reliability and validity of rating scales. *Methodology*, 4(2), 73-79. DOI: 10.1027/1614-2241.4.2.73
- Marôco, J. (2007). *Análise estatística com o SPSS statistics* (3rd ed.). Lisboa: Edições Sílabo.
- Matsunaga, M. (2010). How to factor-analyze your data right: Do's, don'ts, and how-to's. *International Journal of Psychological Research*, 3(1), 97-110.
- Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks: SAGE Publications, Inc.
- Nunnally J. (1976). *Psychometric Theory*. New York: McGrawHill.
- Order no. 3863/2014*. Secretaria de Estado do Emprego. Diário da República, 2.^a série - n.º 50 - 12 de março de 2014, 6845.
- Pestana, M. H., & Gageiro, J. N. (2014). *Análise de dados para ciências sociais. A complementaridade do SPSS* (6 ed.). Lisboa: Sílabo.
- Santos, S. (2013). Transição para a Vida Ativa. *Revista da Educação Especial e Reabilitação* 20, 81-96.
- Santos, S. (2019). Transição para a vida ativa: mito ou realidade? In M. T. Santos, A. Santo, J. Ramalho, J. Santo, M. Faria, C. Almeida, & L. Murta (Eds.), *Transição para a vida adulta: percursos reais, possíveis e desejáveis* (pp. 64-75). Beja: Edições IPBeja.

- Santos, T., Santo, A., Ramalho, J., Faria, M., Almeida, C., Fernandes, J., & Santo, J. (2019). Percursos de vida de jovens que foram abrangidos por currículos específicos. *Educar hoje: Diálogos entre psicologia, educação e currículo*, 231-246.
- Simões, C., & Santos, S. (2017). O impacto do emprego na qualidade de vida das pessoas com dificuldade intelectual e desenvolvimental. *Revista Lusófona de Educação*, 34, 181-197.
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal*, 5(2), 18-27. DOI: 10.2139/ssrn.3205035 ⁷

Received on: 10/10/2019

Reformulated on: 26/01/2020

Approved on: 28/01/2020